

**SEGATRICE A NASTRO PER METALLI FERROSI  
BAND SAW FOR FERROUS METALS  
BANDSAEGEMASCHINE FÜR EISENMETALLE  
SCIE A RUBAN POUR METAUX FERREUX  
SIERRA DE CINTA PARA METALES FERROSOS**

**MANUALE DI ISTRUZIONI PER L'USO - INSTRUCTION MANUAL FOR OPERATION  
BETRIEBSANLEITUNG - MANUEL D'INSTRUCTIONS POUR L'EMPLOI  
MANUAL DE INSTRUCCIONES DE USO**

**COSTRUTTORE:**

**MANUFACTURER:**

**ERBAUER:**

**CONSTRUCTEUR:**

**CONSTRUCTOR:**

**MACC S.p.A. SCHIO (VI) - ITALY**

**MODELLO:**

**MODEL:**

**MODELL:**

**MODELE:**

**MODELO:**

**SPECIAL 280 CSO**

**MATRICOLA:**

**SERIAL NUMBER:**

**KENNNUMMER:**

**MATRICULE:**

**MATRICULA:**

**ANNO DI COSTRUZIONE:**

**YEAR OF CONSTRUCTION:**

**BAUJAHR:**

**ANNEE DE CONSTRUCTION:**

**AÑO DE CONSTRUCCION:**

**2010**





**DICHIARAZIONE DI CONFORMITA'  
CERTIFICATE OF CONFORMITY  
KONFORMITÄTSBESCHEINIGUNG  
DECLARATION DE CONFORMITE  
DECLARACION DE CONFORMIDAD**

**MACC Costruzioni Meccaniche S.p.A. - Via Lago di Albano, 10 - Schio ( VI ) Italy -  
Tel. 0445/575005 Fax.0445/575006 Web site: [www.macc.it](http://www.macc.it) E-mail: [info@macc.it](mailto:info@macc.it)**

- Dichiaro, sotto la propria responsabilità, che la macchina nuova descritta in appresso:
- Declares, by its own undertaking, that the new machine described below:
- Erklärt auf eigene Verantwortung, daß die nachstehend beschriebene neue Maschine:
- Déclare sous sa propre responsabilité, que la machine neuve décrite de suite:
- Declara, bajo la propia responsabilidad, que la nueva máquina descrita a continuación:

**SEGATRICE A NASTRO PER METALLI  
BAND SAW MACHINE FOR METALS  
BANDSAEGEMASCHINE FÜR EISENMETALLE  
SCIE A RUBAN POUR METAUX  
SIERRA DE CINTA PARA METALES**

**TIPO - TYPE - TYP - TYPE - TIPO**

**SPECIAL 280 CSO**

**MATRICOLA - SERIAL NUMBER - KENNNUMMER - MATRICULE - MATRICULA**

-E' CONFORME ALLA DIRETTIVA MACCHINE 2006/42/CEE (EX 98/37/CEE, EX 89/392/CEE), ALLA DIRETTIVA COMPATIBILITA' ELETTROMAGNETICA 89/336/CEE ED ALLA DIRETTIVA BASSA TENSIONE 73/23/CEE (MODIFICATE DALLA 93/68/CEE).

-IS IN COMPLIANCE WITH THE 2006/42/EEC MACHINERY DIRECTIVE (EX 98/37/EEC, EX 89/392/EEC), 89/336 EEC DIRECTIVE ON ELECTROMAGNETIC COMPATIBILITY, 73/23/EEC LOW VOLTAGE DIRECTIVE (AMENDED BY 93/68/EEC).

-DEN NORMEN BEZÜGLICH DER MASCHINEN-RICHTLINIE 2006/42/EWG (VOR 98/37/EWG, VOR 89/392/EWG), 89/336/EWG RICHTLINIE ZUR ELEKTROMAGNETISCHEN KOMPATIBILITÄT, 73/23/EWG RICHTLINIE FÜR NIEDERSpannung (ABGEANDERT DURCH 93/68/EWG) ENTSPRICHT.

-EST CONFORME A LA DIRECTIVE MASCHINES 2006/42/CEE (ETAIT 98/37/CEE, ETAIT 89/392/CEE), 89/336/CEE DIRECTIVE SUR LA COMPATIBILITÉ ÉLECTROMAGNÉTIQUE, 73/23/CEE DIRECTIVE BASSE TENSION (MODIFIÉES PAR 93/68/CEE).

-HA SIDO FABRICADA CONFORME A LA DIRECTIVA MÁQUINAS 2006/42/CEE (ANTES 98/37/CEE, ANTES 89/392/CEE), 89/336/CEE DIRECTIVA COMPATIBILIDAD ELECTROMAGNÉTICA, 73/23/CEE DIRECTIVA BAJA TENSION (MODIFICADAS POR 93/68/CEE).

**Nome del Rappresentante Legale - Name of the Legal Representative - Name des Gesetzlichen Vertreters - Nom du Représentant Légal - Apellido del Representante Legal:**

**Zanella Gianfranco**

**Firma - Signature - Unterschrift - Signature - Firma**

**Schio,**



E' SEVERAMENTE VIETATO UTILIZZARE LA MACCHINA SENZA LIQUIDO DI TAGLIO.

IT IS STRICTLY FORBIDDEN TO USE THE MACHINE WITHOUT CUTTING FLUID.

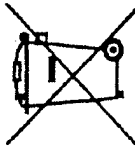
ES IST STRENG VERBOTEN, DIE MASCHINE OHNE SCHNEIDFLÜSSIGKEIT IN BETRIEB ZU NEHMEN.

IL EST SEVEREMENT INTERDIT D'UTILISER LA MACHINE SANS LIQUIDE DE COUPE.

SE PROHÍBE TERMINANTEMENTE UTILIZAR LA MÁQUINA SIN LÍQUIDO DE CORTE.

É SEVERAMENTE PROIBIDO UTILIZAR A MÁQUINA SEM LÍQUIDO DE CORTE.

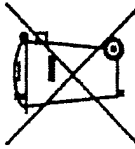
Magyarul



Felelősségé váltélektromos és elektronikus készülékek hulladékaként való elválogatása (Használható az Európai Unió és egyéb európai országok szelektív hulladékgyűjtési rendszereiben)

Ez a szimbólum a készüléken vagy a csomagolásán azt jelzi, hogy a terméket ne kezelje háztartási hulladékként. Kérjük, hogy az elektronos és elektronikai hulladék gyűjtésére kijelölt gyűjtőhelyen adja át. A felesleges váltélektromos és elektronikus hulladék helyes kezelésével segít megelőzni a környezeti és az emberi egészségre károsodást, mely bekövetkezhetne, ha nem követi a hulladék kezelés helyes módját. Az anyagok, újrahasznosítása segít a természeti erőforrások megőrzésében. A termék újrahasznosítása érdekében további információkat forduljon a helyi önkormányzatokhoz, a helyi hulladékgyűjtő szolgáltatóhoz vagy ahhoz az üzlethez, ahol a terméket megvásárolta.

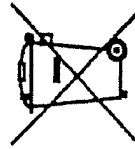
Česky



Nakládání a nepotřebným elektrickým a elektronickým zařízením (platné v Evropské unii a dalších evropských státech uplatňujících oddělený systém sběru)

Tento symbol umístěný na výrobku nebo jeho balení upozorňuje, že s výrobkem po ukončení jeho životnosti by nemělo být nakládáno jako s běžným odpadem z domácnosti. Místo toho by měl být odložen do sběrného místa, určeného k recyklaci elektrických výrobků a zařízení. Dodržování této instrukce zabrání negativnímu dopadu na životní prostředí a zdraví lidí, které neopak může být způsobeno nesprávným naložením s výrobkem při jeho likvidaci. Recyklováním materiálů, z nichž je vyroben, pomůžete zachovat přírodní zdroje. Pro získání dalších informací o recyklaci tohoto výrobku kontaktujte, prosím, místní orgány místní správy, místní firmu zabezpečující likvidaci a sběr odpadů nebo prodejce, v němž jste výrobek zakoupili.

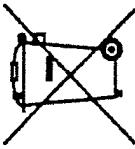
Slovensky



Likvidácia starých elektrických a elektronických zariadení (Platí v Európskej únii a ostatných európskych krajinách so zavedeným separovaným zberom)

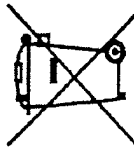
Tento symbol na výrobku alebo obale znamená, že s výrobkom nemôže byť nakladané ako s domovým odpadom. Miesto toho je potrebné ho doručiť do vyhradeného zberného miesta na recykláciu elektrozariadení. Tým, že zaisíte správne zneškodnenie, pomôžete zabrániť potenciálnemu negatívnemu vplyvu na životné prostredie a ľudské zdravie, ktoré by v opačnom prípade hrozil pri nesprávnom nakladaní s týmito výrobkami. Recykláciou materiálov pomôhate uchrániť prírodné zdroje. Pre získanie ďalších podrobných informácií o recyklácii tohoto výrobku kontaktujte, prosím, váš miestny alebo obecný úrad, miestnu službu pre zber domového odpadu alebo predajcu, kde ste výrobok zakúpili.

Türkçe



Elektronik ve Elektrikli Ekipmanların Atılması (Avrupa Birliği'nde ve aynı toplama sistemlerinde sınırlı olarak Avrupa ülkelerinde uygulanır)  
Ürün veya ambalajı üzerinde bulunan bu sembol, bu ürünün bir ev atığı olarak muamele görmemesi gerektiğini gösterir. Bunun yerine, elektrikli ve elektronik ekipmanların geri dönüşümü için mevcut olan uygun toplama noktasına teslim edilmelidir. Bu ürünü doğru şekilde atılması sağlanarak, bu ürünün yanlış müdahale edilmesinden kaynaklı olumsuz etkiler ve çevre ile insan sağlığı üzerindeki olumsuz etkilerde bulaşılabilir durumların önlenmesine yardımcı olmus olursunuz. Malzemelerin geri dönüşümü, doğal kaynakların korunmasına yardımcı olacaktır. Bu ürünü geri dönüşümüyle ilgili daha fazla bilgi için, lütfen sızın yaşadığınız bölgenin yerel ofisine, evsel atıklar toplama servisinde veya bu ürünü satın aldığınız mağazaya temasla geçin.

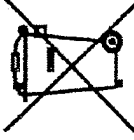
Slovensko



Odstava stare elektrické in elektronske opreme (veljavno v evropski uniji in ostalih evropskih državah s sistemom zbiranja ločenih odpadkov)

Če se na izdelku ali na njegovih embalažah nahaja ta simbol, pomeni, da z izdelkom ne smeta ravnati enako kot z drugim gospodinjstvenim odpadkom. Morate ga oddati na ustrezno zbirno mesto za recikliranje elektrčne in elektronske opreme. S pravilno oddajo tega izdelka boste pomagali preprečiti negativne posledice na okolje in zdravje ljudi, do katerih bi prišlo v primeru neustreznega ravnanja ob odstranitvi tega izdelka. Recikliranje materiala bo pripomoglo k ohranjanju naravnih virov. Podrobnejše informacije o recikliranju tega izdelka lahko dobite pri lokalni mestni upravi, službi oddajanja gospodinjstvenih odpadkov ali v trgovini, kjer ste izdelek kupili. Odpadno električno in elektronsko opremo lahko oddate brezplačno tudi distributerju neposredno ob dobavi električne oz. elektronske opreme.

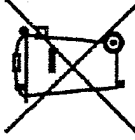
Русский



Утилизация электрического и электронного оборудования (директива применяется в странах Евросоюза и других европейских странах, где действуют системы раздельного сбора отходов)

Данный знак на устройстве или его упаковке обозначает, что данное устройство нельзя утилизировать вместе с прочими бытовыми отходами. Его следует сдать в соответствующий приемный пункт переработки электрических и электронных отходов. Неправильная утилизация данного изделия может негативно повлиять на окружающую среду и здоровье людей, поэтому для предотвращения подобных последствий необходимо выполнить специальные требования по утилизации этого изделия. Переработка данных материалов поможет сохранить природные ресурсы. Для получения более подробной информации о переработке этого изделия обратитесь в местные органы городского управления, службу сбора бытовых отходов или в магазин, где было приобретено изделие.

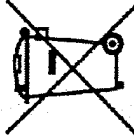
Suomi



Käytöstä poistettujen sähkö- ja elektronikalaitteiden hävitys (Euroopan Unioni) ja muuten Euroopan maiden keräysjärjestelmät)

Symboli, joka on merkitty Tuotteen tai sen pakkauksen, esoitteen, etä tätt tuotetta ei saa käsitellä talousjätteenä. Tuote on sen sijaan luovutettava sopivaan sähkö- ja elektronikalaitteiden kierrätyksessä huolehdittavaan keräyspisteeseen. Tämän tuotteen asianmukaisen hävittämisen varmistamiseksi tulethan estämään sen mahdolliset ympäristön ja terveyteen kohdistuvat haittavaikutukset, joita voi aiheutua muussa tapauksessa tämän tuotteen epäsäännöllisestä jätehävityksestä. Materiaalien kierrätys säästää luonnonvaroja. Tankempi tietoja tämän tuotteen kierrättämisestä saa paikallisesta kunnantontimesta.

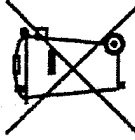
Dansk



Bortskaffelse af elektrisk og elektronisk udstyr (gælder i EU og andre europæiske lande med egne indsamlingssystemer)

Hvis dette symbol findes på produktet eller på emballagen betyder det, at det pågældende produkt ikke må bortskaffes som almindeligt husholdningsaffald. Du skal i stedet aflevere det på et indsamlingssted, så det elektriske og elektroniske udstyr kan blive genbragt. Når du bortskaffer produktet korrekt hjælper du med at forhindre de mulige negative påvirkninger af miljøet eller sundheden, der kan opstå, hvis produktet bortskaffes på upassende vis. Genbrug af materialer er med at bevare naturens ressourcer. Yderligere oplysninger om genbrug af produktet fås på kommunen, på genbrugscentralen eller i den butik, hvor du købte produktet.

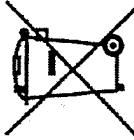
Português



Tratamento de Equipamentos Eléctricos e Electrónicos ou final da sua vida útil (Aplicável na União Europeia e em países Europeus com sistemas de recolha selectiva de resíduos)

Este símbolo, colocado no produto ou na sua embalagem, indica que este não deve ser tratado como resíduo urbano indiferenciado. Deve sim ser colocado num ponto de recolha designado a resíduos de equipamentos eléctricos e electrónicos. Assegurando-se que este produto é correctamente depositado, irá prevenir potenciais consequências negativas para o ambiente, bem como para a saúde, que de outra forma poderiam ocorrer pelo mau manuseamento destes produtos. A reciclagem dos materiais contribuirá para a conservação dos recursos naturais. Para obter informação mais detalhada sobre a reciclagem deste produto, por favor contacte o município onde reside, os serviços de recolha de resíduos da sua área ou a loja onde adquiriu o produto.

Ελληνικά



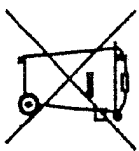
Αποκοπή Παλαιού Ηλεκτρικού & Ηλεκτρονικού Εξοπλισμού(χρησιμοποιείται στην Ευρωπαϊκή Ένωση και άλλες Ευρωπαϊκές χώρες με ξεχωριστά συστήματα περιουλοποίησης)

Το σύμβολο αυτό επάνω στο προϊόν ή στη συσκευασία του σημαίνει ότι το προϊόν δεν πρέπει να πεταχτεί μαζί με τα οικιακά απορρίματα αλλά πρέπει να παραδοθεί σε ένα κατάλληλο σημείο συλλογής ηλεκτρολογικών και ηλεκτρονικών υλικών προς ανακύκλωση. Με το να βεβαιωθείτε ότι το προϊόν πετάχτηκε σωστά, βοηθάτε στην πρόληψη πιθανών αρνητικών επιπτώσεων στο περιβάλλον και την υγεία. Η ανακύκλωση των υλικών θα βοηθήσει στην εξοικονόμηση φυσικών πόρων. Για περισσότερες πληροφορίες σχετικά με την ανακύκλωση αυτού του προϊόντος, παρακαλούμε επικοινωνήστε με τις υπηρεσίες καθαρότητας του δήμου σας ή το κατάστημα όπου αγοράσατε το προϊόν.

**English**

**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)**

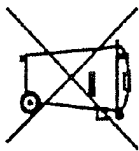
This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



**Français**

**Traitement des appareils électriques et électroniques en fin de vie (Applicable dans les pays de l'Union Européenne et aux autres pays européens disposant de systèmes de collecte sélective)**

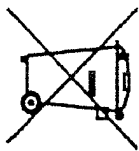
Ce symbole apposé sur le produit ou sur son emballage, indique que ce produit ne doit pas être traité avec les déchets ménagers. Il doit être remis à un point de collecte approprié pour le recyclage des équipements électriques et électroniques. En s'assurant que ce produit est bien mis au rebut de manière appropriée, vous aidez à prévenir les conséquences négatives potentielles pour l'environnement et la santé humaine. Le recyclage des matériaux aide à conserver les ressources naturelles. Pour toute information supplémentaire au sujet du recyclage de ce produit, vous pouvez contacter votre municipalité, votre déchetterie ou le magasin où vous avez acheté le produit.



**Deutsch**

**Entsorgung von gebrauchten elektrischen und elektronischen Geräten (Anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem für diese Geräte)**

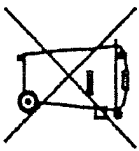
Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass dieses Produkt nicht als normaler Haushaltsabfall zu behandeln ist, sondern an einer Annahmestelle für das Recycling von elektrischen und elektronischen Geräten abgegeben werden muss. Durch Ihren Beitrag zum korrekten Entsorgen dieses Produkts schützen Sie die Umwelt und die Gesundheit Ihrer Mitmenschen. Umwelt und Gesundheit werden durch falsches Entsorgen gefährdet. Materialrecycling hilft den Verbrauch von Rohstoffen zu verringern. Weitere Informationen über das Recycling dieses Produkts erhalten Sie von Ihrer Gemeinde, dem kommunalen Entsorgungsbereichen oder dem Geschäft, in dem Sie das Produkt gekauft haben.



**Español**

**Tratamiento de los equipos eléctricos y electrónicos al final de su vida útil (Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)**

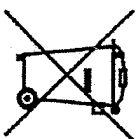
Este símbolo en su equipo o su embalaje indica que el presente producto no puede ser tratado como residuos domésticos normales, sino que deben entregarse en el correspondiente punto de recogida de equipos eléctricos y electrónicos. Asegurándose de que este producto es desechado correctamente, Ud. está ayudando a prevenir las consecuencias negativas para el medio ambiente y la salud humana que podrían derivarse de la incorrecta manipulación de este producto. El reciclaje de materiales ayuda a conservar las reservas naturales. Para recibir información detallada sobre el reciclaje de este producto, por favor, contacte con su ayuntamiento, su punto de recogida más cercano o el distribuidor donde adquirió el producto.



**Nederlands**

**Verwijdering van Oude Elektrische en Elektronische Apparaten (Toepasbaar in de Europese Unie en andere Europese landen met gescheiden ophaal systemen)**

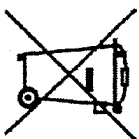
Het symbool op het product of op de verpakking wijst erop dat dit product niet als huishoudafval mag worden behandeld. Het moet echter naar een plaats worden gebracht waar elektrische en elektronische apparatuur wordt gerecycled. Als u ervoor zorgt dat dit product op de correcte manier wordt verwijderd, voorkomt u mogelijk voor mens en milieu negatieve gevolgen die zich zouden kunnen voordoen in geval van verkeerde afvalbehandeling. De recycling van materialen draagt bij tot het vrijwaren van natuurlijke bronnen. Voor meer details in verband met het recyclen van dit product, neem u het best contact op met de gemeentelijke instanties, het bedrijf of de dienst bedakt met de verwijdering van huishoudafval of de winkel waar u het product hebt gekocht.



**Svenska**

**Omhändertagande av gamla elektriska och elektroniska produkter (Användbar i den Europeiska Unionen och andra europeiska länder med separata insamlingsystem)**

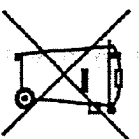
Symbolen på produkten eller emballaget anger att produkten inte får hanteras som hushållsavfall. Den skall i stället lämnas in på uppsamlingsplats för återvinning av el- och elektronikkomponenter. Genom att säkerställa att produkten hanteras på rätt sätt bidrar du till att förebygga eventuellt negativa miljö- och hälsoeffekter som kan uppstå om produkten kasseras som vanligt avfall. Återvinning av material hjälper till att bibehålla naturens resurser. För ytterligare upplysningar om återvinning bör du kontakta lokala myndigheter eller sophämningsföretag eller affären där du köpte varan.



**Italiano**

**Trattamento del dispositivo elettrico ed elettronico a fine vita (Applicabile in tutti i paesi dell'Unione Europea e in quelli con sistema di raccolta differenziata)**

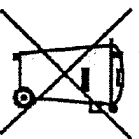
Questo simbolo sul prodotto o sulla confezione indica che il prodotto non deve essere considerato come un normale rifiuto domestico, ma deve invece essere consegnato ad un punto di raccolta appropriato per il riciclo di apparecchi elettrici ed elettronici. Assicurandosi che questo prodotto sia smaltito correttamente, voi contribuite a prevenire potenziali conseguenze negative per l'ambiente e per la salute che potrebbero altrimenti essere causate dal suo smaltimento inadeguato. Il riciclaggio dei materiali aiuta a conservare le risorse naturali. Per informazioni più dettagliate circa il riciclaggio di questo prodotto, potete contattare l'ufficio comunale. Il servizio locale di smaltimento rifiuti oppure il negozio dove l'avete acquistato.



**Język polski**

**Podzycie się Zużytego Sprzętu (Stosowane w krajach Unii Europejskiej i w pozostałych krajach europejskich mających własne systemy zbiorów)**

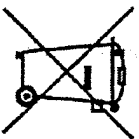
Taki symbol na produkcie lub jego opakowaniu oznacza, że produkt nie może być traktowany jako odpad komunalny, lecz powinien się go dostarczyć do odpowiedniego punktu zbiórki sprzętu elektrycznego i elektronicznego. W celu recyklingu. Poprzez użycie się, że dyspozycja doby czcra produktu jest poprawna, zapobiega się potencjalnym negatywnym wpływom na środowisko oraz zdrowiu ludzi, jakie mogłyby wytworzyć w przypadku niewłaściwego postępowania. Recykling materiałów pomaga w ochronie naturalnych źródeł. W celu uzyskania bardziej szczegółowych informacji na temat recyklingu tego produktu, należy skontaktować się z naszym lokalnym biurom, że służbami oczyszczania miasta lub ze sklepem, w którym zakupiony został ten produkt.



**Norsk**

**Avhending av gamle elektriske og elektroniske apparater (gjelder i EU og andre europeiske land med separat Innsamlingsystem)**

Dette symbolet på produktet eller innpakningen indikerer at dette produktet ikke må håndteres som husholdningsavfall. I stedet skal det leveres inn til spesiell innsamlingspunkt for gjenvinning av dat elektriske og elektroniske utstyr. Ved å sørge for at dette produktet avhendes på korrekt måte, vil du hjelpe til med å forhindre potensielle negative påvirkninger på miljøet og helse, som ellers kan være resultatet av feilaktig avfallshåndtering av dette produktet. Gjenvinning av disse materialene vil hjelpe til med å ta vare på våre naturressuser. For mer informasjon om gjenvinning av dette produktet, kan du kontakte lokale myndigheter.



## 1. INTRODUCTION

This operation instruction manual conforms to the requirements of the 2006/42/EEC Machine Directives and subsequent amendments.

In the light of this, special attention has been given to safety aspects and accident prevention in the work-place for each stage in the machine's "life". Information which could be of particular assistance to the operator has been highlighted.

**The "Operating instructions" are an integral part of the machine and should be consulted before, during and after the start up of the machine and whenever else required. The content of these instructions should always be carefully observed.**

The observance of the above is the only way to achieve the two fundamental aims of this manual:

- **Optimization of machine performance**
- **Prevent damage to the machine and injury to the operator**

The index of the chapters and the index of the drawings, diagrams and tables is contained in chapter 3 and can be used to help the location of specific information.

|   |
|---|
| <b>CAUTION : BEFORE INSTALLING THE MACHINE, READ<br/>THE OPERATING INSTRUCTIONS CAREFULLY</b> |
|---|

## 2. INFORMATION ABOUT MAINTENANCE ASSISTANCE

### 2.1 GUARANTEE

- MACC S.p.A. products are guaranteed against material and manufacturing defects for a period of 12 months from the date of delivery or, if the machine is installed by MACC employees, from the date of machine start up.
- The buyer is only entitled to the replacement of parts which are acknowledged as faulty: carriage and packing are at the buyer's expense. In the event of the above, the following information should be supplied:
  1. Date and number of purchasing document
  2. Machine model
  3. Serial number
  4. Code of any relevant drawings
- Requests for compensation for the inactivity of the machine will not be accepted.
- The guarantee does not cover uses which are not in line with these operating instructions which are an integral part of the machine. Nor is maintenance covered if the instructions supplied are not observed.
- The guarantee will not cover machines which have undergone unauthorized modifications.
- Modification or tampering with the safety devices is strictly forbidden.

## 3. INDEX

### 3.1 INDEX OF CHAPTERS

|          |  |
|----------|--|
| Chap. 1  | Introduction   |
| Chap. 2  | Information about maintenance assistance   |
| Chap. 3  | Index of chapters, drawings, diagrams and tables   |
| Chap. 4  | Description of the machine<br>Safety standards complied with during the design and construction of the machine<br>Description of the machine and its components<br>Intended and unsuitable uses of the machine               |
| Chap. 5  | Main technical data  |
| Chap. 6  | Handling and transportation  |
| Chap. 7  | Installation   |
| Chap. 8  | Start up and operation<br>Devices and their location<br>Tools supplied<br>Operation<br>Special safety checks<br>General safety rules<br>Measures to prevent residual risks<br>Safety, Guidance, Notice Labels on the Machine |
| Chap. 9  | Maintenance and repairs<br>General safety measures<br>Routine checks and maintenance<br>Description of routine maintenance   |
| Chap. 10 | Information regarding environmental noise  |
| Chap. 11 | Laying off – Demolition  |
| Chap. 12 | List of spare parts  |

### 3.2 INDEX OF DRAWINGS, DIAGRAMS AND TABLES

| ENCL. TYPE       | DESCRIPTION  | ENCL No. | CHAP.           |
|------------------|--|----------|-----------------|
| Table            | Cutting capacity - Selection of blade - Cutting speeds | 1        | 8.3             |
| Drawings         | Handling and transportation - Installation plan        | 2        | 6/7A/7B/8.1/9.3 |
| Drawings         | Blade guides - Blade guide bearings - Vice block       | 3        | 7C/8.3/9.3      |
| Drawings         | Vice block – Tensioning                                | 4        | 8.3/9.3         |
| Drawings         | Rotation block - Motor - Machine exploded view         | 5        | 7C              |
| Drawings-Diagram | Plate with electrical components - Wiring diagram      | 6        |                 |
| Diagram          | Hydraulic diagram                                      | 7        |                 |

## 4. DESCRIPTION OF THE MACHINE

### 4.1 SAFETY STANDARDS COMPLIED WITH DURING THE DESIGN AND CONSTRUCTION OF THE MACHINE

The machine produced by us is in compliance with:

- **2006/42/EEC Machinery Directive** (ex 98/37/EEC, as amended by the 89/392EEC, 91/368/EEC, 93/44/EEC and 93/68/EEC Directives ).

The following Standards apply:

- EN ISO12100-1 2005 Safety of machinery - Basic concepts and general principles for design. Basic terminology and methods.
- EN ISO12100-2 2005 Safety of machinery. Basic concepts and general principles for design. Specifications and technical principles.
- EN 418 1994 Safety of machinery. Emergency stop devices, functional aspects - design principles.
- EN 983 1996 Safety requirements related to systems and components for hydraulics and pneumatic transmissions.
- EN 1037 1995 Safety of machinery. Isolation and energy dissipation. Prevention of unexpected start-up.
- EN 1088 1995 Safety of machinery - Interlocking devices with and without guard - locking. General principles and provisions for design.
- EN 60204-1 1998 Safety of machinery. Electrical equipment of machines. Part 1 : General requirements Sa
- EN 294 1992 Safety of machinery. Safety distances to prevent danger zones being reached by the upper limbs.

- **89/336/EEC Directive on electromagnetic compatibility**, as amended by the 92/31/EEC, 96/68/EEC, 93/97/EEC and 93/68/EEC

The following Standards apply:

- EN 55014-1 2000 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus.
- EN 61000-3-2 2000 Electromagnetic compatibility (EMC) -- Part 3-2: Limits - Limits for harmonic current emissions.
- EN 61000-3-11 2000 Electromagnetic compatibility (EMC) -- Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.
- EN 55022 1998 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
- EN 61000-4-2 1995 Electromagnetic compatibility (EMC) -- Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
- EN 61000-4-4 2004 Electromagnetic compatibility (EMC) -- Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
- EN 61000-4-6 1996 Electromagnetic compatibility (EMC) -- Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields

### 73/23/EEC Low Voltage Directive, as amended by the 93/68/EEC Directive

**Directive 2003/11/EC** Directive 2003/11/EC of the European Parliament and of the Council of 6 February 2003 amending for the 24th time Council Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (pentabromodiphenyl ether, octabromodiphenyl ether)

Directive 2002/44/EC of the European Parliament and of the Council of 25 June 2002 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (vibration) (sixteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)

### 4.2 DESCRIPTION OF THE MACHINE AND ITS COMPONENTS

The SPECIAL 280 CSO band sawing machine produced by MACC has a sturdy frame made from welded and painted sheet-steel. The upper surface is designed to allow the complete draining away of the cutting fluid. The band holding bow is made of cast-iron and has generous dimensions, providing the cutting unit with the necessary strength and precision. The vice unit is made of cast-iron and clamps the material to be cut securely. The bar-stop device allows the length required to be preset and a constant level of performance for repeated cuts. The blade-holding bow is firmly attached to a reduction unit built onto the motor and to the base by means of a joint which allows 60° rotation to the right. This joint also allows the cutting movement to advance manually or by falling.

The coolant pump is fitted to the machine base. The main switch is located on the front panel. The choice of one of the two motor rotation speeds and therefore cutting speed is carried out by the main switch. The front panel is also fitted with an emergency stop button and a START button. The control lever, fitted with an ergonomic hand-grip and activation button with safety release action, reduces fatigue during operation to a minimum. The blade is protected by a guard with interlock which covers the upper area and the handwheels and by two adjustable lower guards which protect the operator from ejected shavings and coolant. The machine is supplied with a set of service spanners.

#### 4.3 INTENDED AND UNSUITABLE USES OF THE MACHINE

The SPECIAL 280 CSO band sawing machine has been designed and built to cut bars, structural steel and ferrous metal pipes in accordance with the instructions contained in this manual. Therefore, the cutting of other materials is not permitted: if the above recommendations are not observed, the machine could be damaged and the health and safety of the operator put at risk. Cutting is not permitted, if the bar has not been first locked in the vice.

### 5. MAIN TECHNICAL DATA

Under no circumstances should the following data be altered, this is in order to protect the correct functioning of the machine and to avoid creating safety risks for the operator.

| Three phase power supply            |                    |
|-------------------------------------|--------------------|
| Motor power                         | 0.75 – 1.1 kW      |
| Motor revolutions                   | 700 - 1420 rpm     |
| Cutting speed                       | 32 - 66 m/1'       |
| Single phase power supply           |                    |
| Motor power                         | 1.1 kW             |
| Motor revolutions                   | 1380 rpm           |
| Cutting speed                       | 64 m/1'            |
| Electric pump                       | 0.06 kW            |
| Blade size (length x width x thick) | 2450 x 27 x 0.9 mm |
| Cutting thickness                   | 1,2 mm             |
| Cutting angle                       | 60° dx             |
| Material clamping vice max opening  | 250 mm             |
| Rapid clamping displacement         | 5 mm               |
| Jaws height                         | 120 mm             |
| Jaws length                         | 160 mm             |
| Bed height                          | 925 mm             |
| Clamping force                      | 3920 N (400 kg)    |
| Coolant tank capacity               | 12 liters          |
| Machine weight                      | ~2255 N (230 kg)   |

### 6. HANDLING AND TRANSPORTATION

For safe handling and transportation use a lift truck for movement indoors also indicated on the drawing 3 Encl. 2. Keep the machine in its normal position and avoid turning it upside down. **If the machine is fastened to the pedestal, stability will be greatly reduced and therefore all the necessary measures should be taken to stop the machine from tipping over.**

All handling and transportation operations should be carried out by trained staff.

### 7. MACHINE INSTALLATION

#### A. MACHINE CHECK

The machine should be checked to make sure that it has not been damaged during transportation and handling. If the machine appears to have been damaged, contact MACC immediately. Fit all the supplied accessories onto the machine such as the bar stop 118 and the roller arm 143 (DRAW. 4 ENCL.2).

#### B. FASTENING OF THE MACHINE

**The machine will be able to operate in keeping with the technical parameters supplied by MACC if it is positioned correctly and fastened securely to the bench or the factory floor so that vibrations are minimal during operation . Consult drawing 4 SPECIAL 280 CSO Installation plan Encl. 2.**

#### C. BAND ASSEMBLY

Remove the bow guard 2 by unscrewing the screws 37 the washers 102 and the handwheels 124 (DRAW.9-10 ENCL. 5). Fit the band by inserting it first between the bearings of the blade guide heads and then on the two pulleys, tighten the blade slightly by means of the hand wheel 28 and replace the bow guard. Check that the band is fitted with the correct direction of teeth, as shown in drawing 5 enclosed document 3. Make sure that the band type (dimensions 2450x27x0.9) and its teeth pitch are suited to the material to be cut.

#### D. ELECTRICAL CONNECTION TO THE MAINS

**Install a differential thermomagnetic switch with characteristics suited to the mains.**

Make sure that the power supply voltage corresponds to the voltage on the motor plate. Connect the cable to the power supply line observing the colour codes of the individual wires, pay particular attention to the earth wire. Connect the machine, make sure that the rotation of the circular blade is in the direction shown by the arrow on the guard.

#### E. CUTTING COOLANT

For the cooling of the circular blade, fill the tank with emulsible oil obtained from a mixture of water and AGIP AQUAMET 700 EP oil with a percentage of 5-7%



## 8. MACHINE START UP AND OPERATION

### 8.1 DEVICES AND THEIR LOCATION

(The location of the devices described is shown on the SPECIAL 280 CSO installation plan Draw.4 Encl.2)

|          |   |
|----------|---|
| Code 203 | CHANGE OVER SWITCH  |
| Code 96  | START-STOP MICROSWITCH: situated inside the handle located at the end of the control lever and has safety release action. |
| Code 105 | ELECTRIC PUMP   |
| Code 117 | CUTTING ANGLE DEVICE: to check that cutting inclination is as required  |
| Code 132 | LOCKING VICE  |
| Code 118 | BAR STOP  |
| Code 94  | CONTROL LEVER WITH HANDLE   |

### 8.2 TOOLS SUPPLIED

- 1 Allen wrench size 3
- 1 Allen wrench size 5
- 1 Allen wrench size 6
- 1 Allen wrench size 8
- 1 Allen wrench size 10

### 8.3 OPERATION

#### CHECKS TO CARRY OUT BEFORE EACH CUT

- A Tension the band by rotating the handwheel 28 to the end of stroke (mechanic stop). Remember at the end of the operation to loosen the hand wheel to avoid the slackening of the band
- B Check that the hand indicates the required cutting angle (vice scale).
- C Make sure that the bow and the vice are locked by means of the lever 113 (DRAW. 6 ENCL. 3).
- D With the motor off, lower the bow and check that at the end of stroke, the band does not touch the counter-vice 115. If the band does touch, adjust the screw 99 and nut 31 located on the bow.
- E Make sure that the piece to be cut is properly secured in the vice.
- F Make sure that the cooling liquid is circulating in the machine.

#### **IT IS STRICTLY FORBIDDEN TO USE THE MACHINE WITHOUT CUTTING FLUID**

- G When starting the motor, make sure that the band rotates in the direction of the arrow shown in DRAW. 5 ENCL. 3
- H To obtain maximum cutting accuracy, the unit must be located the nearest possible to the workpiece. Clamp the workpiece with the vice. Release the blade guide arm 60 (DRAW.5 ENCL.3) with clamping lever 17 and move it near the vice jaw so that it doesn't touch it during the cutting operation, then secure it again. When carrying out this operation, make sure that the blade guide guard does not come out of the bow guard leaving a part of the blade exposed.

#### CUTTING OPERATION

- A Before cutting, check that the inclination is the one required. In order to correct or change the inclination, place the bench lever 113 in position C (DRAW. 6 ENCL. 3) and after correction, move it back to position D.
- B Clamp the material to be cut with the handwheel 125 after having positioned the clamp near the piece to be cut by lowering the lever 136 from position A to position B allowing a fast displacement (DRAW. 6 ENCL. 3) with selector 229 in M position. Turn the main switch 203 to the position required, take hold of the handle 95 located at the end of head lever and press the button. The blade will now start turning, position the blade carefully on the piece to be cut. Then increase the pressure in order to accelerate the cutting operation without using excessive force.
- C With selector 229 in CSO position. turn the main switch 203 to the position required. After having started the unit by pressing the START push button 208, the blade starts to rotate. The down stroke of the bow can be adjusted by means of the appropriate regulator. Position the blade carefully on the piece to be cut. Then increase the pressure with the regulator in order to accelerate the cutting operation without using excessive force.
- D To make a series of cuts, position the bar stop in correspondence of the size required. Fix it into position by using the handwheel 121 (DRAW. 7 ENCL. 4).
- E To replace the band, carry out the same operations used to assemble the band (chapter 7c).
- F For the choice of blade see table DRAW.1 ENCL. 1.

**We strongly discourage the use of blades with ruined or insufficiently sharp cutting edges**

### 8.4 SPECIAL SAFETY CHECKS

- A. Before using the machine, check carefully that the safety devices are in good working order, that the mobile parts are not blocked, that no parts are damaged and that all the components are installed correctly and are functioning properly.
- B. Make sure, before operating the machine, that the screws of the guards and other protective devices are adequately secured, especially the screws of the bow guard.**
- C. Check that the safety microswitches and the emergency button are functioning correctly. Test them during a loadless machine cycle.**
- D. Make sure that the mobile guard does not leave uncovered an angle of more than 5° in order to prevent fingers from entering.**
- E. Pay attention to environmental conditions. Do not expose the machine to rain; do not use it in damp environments, position the machine on a clean dry floor that has no oil or grease stains.
- F. Before using the machine, the operator should make sure that all tools and service spanners used for maintenance or adjustment have been removed.

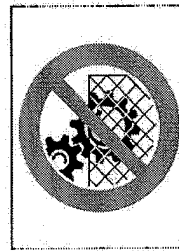
## 8.5 GENERAL SAFETY RULES

- A. Wear appropriate clothing. The operator's clothing should not be loose or dangling nor should it have parts which could easily get caught. Sleeves should contain elastic. Belts, rings or chains should not be worn. Long hair should be kept in a net.
- B. Avoid unstable operating positions. Find a safe and evenly balanced position to operate the machine.
- C. Keep the work area tidy, untidiness increases the risk of accidents.
- D. Do not use the power supply cable to disconnect the plug from the socket. Protect the cable from high temperatures, oil or sharp edges. For outdoor use, only use extension cables which are in line with current regulations.

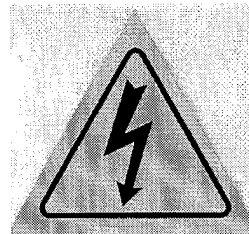
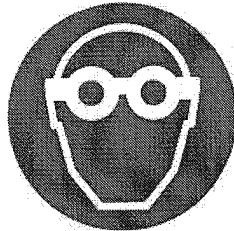
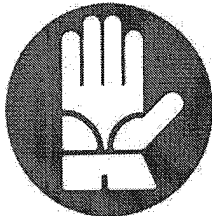
## 8.6 MEASURES TO PREVENT RESIDUAL RISKS

- A. The removal of guards and tampering with the safety devices is strictly forbidden.
- B. Gloves should always be worn.
- C. Standard work clothing should be used and kept closed and should not have flapping parts.
- D. The machine should not be cleaned with liquids under pressure.
- E. In the event of fire, extinguishers should not be used unless they are the powder type. The electric power supply to the machine should always be disconnected in these circumstances.
- F. Do not insert foreign bodies into the motor cover and to not supply the machine with voltage by tampering with the safety microswitches or main switch.
- G. Take the necessary precautions to avoid the machine being started by other people during loading, adjustment, piece changing or cleaning.

### Safety, Guidance, Notice Labels on the Machine



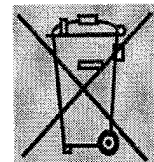
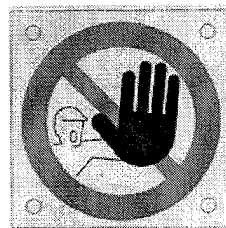
\*NON RIMUOVERE I DISPOSITIVI E LE PROTEZIONI DI SICUREZZA!  
 \*BESCHERMKAPPEN EN BEVEELIGINGEN MOGEN NIET VERWIJDERD WORDEN!  
 \*DO NOT REMOVE THE SAFETY DEVICES AND GUARDS!  
 \*DIE SCHUTZVORRICHTUNGEN NICHT ENTFERNEN!  
 \*NE PAS ENLEVER LES DISPOSITIFS ET LES PROTECTIONS DE SECURITE!  
 \*NO QUITAR LOS DISPOSITIVOS Y LAS PROTECCIONES DE SEGURIDAD!



**COLLEGATO  
 CONNECTED  
 400 VOLT**

**COLLEGATO  
 CONNECTED  
 230 VOLT**

• METTERE IN TENSIONE LA LAMA RUOTANDO IL VOLANTINO FINO A FINE CORSA.  
 • PUT TENSION ON THE BLADE BY ROTATING THE HANDWHEEL TO THE END OF STROKE.  
 • DAS SÄGEBAND SPANNEN, INDEM DAS HANDRAD BIS ZUM ENDE GEDREHT WIRD.  
 • METTRE EN TENSION LA LAME EN TOURNANT LE VOLANT JUSQU'À LA FIN DE COURSE.  
 • TENSIONAR LA CINTA GIRANDO EL VOLANTE HASTA EL FINAL DE CARRERA.



## 9. MAINTENANCE AND REPAIRS

### 9.1 GENERAL SAFETY MEASURES

- A. Lockable main switch. Use the padlock in the event of machine failure or replacement of the band. The padlock key should be entrusted to a responsible person.
- B. Before carrying out any work on electrical equipment, remove the power supply plug from the control panel (disconnect voltage).
- C. Only use cables to supply power, which have a cross-section suited to the power of the machine.
- D. Opening key. The keys of the machine should be kept by authorized personnel. Do not leave the keys for doors which provide access to the hydraulic or electrical parts or keys to lockable switches in easy of reach of unauthorized personnel.
- E. Repairs should only be carried out by authorized personnel. Only spare parts made by the original manufacturer should be used, otherwise these could cause damage or injury.

## 9.2 ROUTINE CHECKS AND MAINTENANCE

| FREQUENCY<br>(working hours) | OPERATION  |
|------------------------------|--|
| 100 hours                    | Adjustment blade guide bearings  |
| 1000                         | Lubrication of mobile parts in the piece locking vice (GREASE AGIP MU 2) |
| 50                           | Cleaning of the coolant tank and filter check                            |
| if necessary                 | Check functioning of bench lever   |

## 9.3 DESCRIPTION OF ROUTINE MAINTENANCE

### A. Adjustment of the blade guide bearings

Loosen the screws 69, rotate the cams 72, so that the blade guide bushings vertically position the blade in axis (DRAW. 5 ENCL.3). Tighten the dowels 67 until the blade secured. Loosen the dowels 67 slightly (about 1/10 of a turn ) and secure the nuts again. The front blade guides must be positioned the nearest possible to the piece to be cut. Check every 3 months the existing tolerance between the blade guides, making sure that it does not exceed the blade thickness of one tenth of a millimeter, so as to avoid inexactnesses in the cut squaring. Periodically check with mounted blade that the blade guide bearings rotate freely.

### B. Lubrication of mobile parts of piece locking vice

Remove jaw 137 (DRAW. 7 ENCL. 4), withdraw vice 132 completely by lowering the lever 136. Clean and grease the mobile parts of the counter-vice 115 and vice 132-133. In case of sliding difficulties or play the clamp guides carry out the following operations: adjust screw 140.

### C. Cleaning of the coolant tank.

The coolant tank can be cleaned by simply removing the crucible 104 (DRAW.4 ENCL.2). Empty the coolant from the tank and collect the coolant in a container for future disposal. Clean away the shavings and the metallic powder, taking care not to scatter this over the machine especially around the motor and the box containing the electrical equipment. Fill the tank with the amount and liquid stated earlier.

### D Checking of bench lever functioning

Check regularly that the rotation release - locking lever is working properly. In the event of the lever not locking correctly, loosen grub screw 156 (draw.6 Encl.3), tighten nut 114 and fasten grub screw 156 again. Make sure that with the bench lever in position C, arm 109 which supports the bow, can rotate freely.

## 10. INFORMATION REGARDING ENVIRONMENTAL NOISE

An environmental noise test carried out on the SPECIAL 280 CSO band saw machine, identical to the machine to which these operation instructions refer, has given the following results:

### ACOUSTIC RADIATION PRESSURE

- $L_{Aeq} = 83,2$  dB (A)
- $L_{peak} = 90,6$  dB (the maximum acceptable value is 140 dB).
- The level of background noise has no influence = 48.5-54.2 dB (A).

The considerable data are the result of tests made under the D.lgs. 277/1991 in the implementation of the directives nr. 80/1107/CEE, nr. 82/605/CEE, nr.84/477/CEE, and 88/642/CEE.

## 11. LAYING OFF AND DISMANTLING

### 11.1 LAYING OFF

If the machine is to be laid off or left idle for a long period, the following operations must be carried out:

- Disconnect the machine from the electricity mains.
- Empty oil from the gear box and cooling liquid from its tank
- Clean carefully the machine by getting rid of all traces of grease, especially on the worked parts that must be protected with anti-oxidants.
- Cover the machine with a sheet, preferably not plastic as it can cause rust due to the humidity condensation.
- Store the machine in a closed, dust-free place.

### 11.2 DISMANTLING

If the machine must be definitively dismantled, its components must be sub-divided for the purpose of a possible recycle of the materials and for the environment safety. The following table is given for your guidance:

| Steel                            | Electrical Components                               | Light alloy | Cast iron        | Bronze Copper | Plastic and rubber      | Various |
|----------------------------------|---|-------------|------------------|---------------|-------------------------|---------|
| Rollers                          | Motors winding                                      | Gear boxes  | Structural parts |               | Seals                   |         |
| Spring                           | Push button and Control system (relais-transformer) | Cylinder    |                  |               | Handle with push-button |         |
| Flange, pin                      |   |             |                  |               | Handwheel               |         |
| Base                             | Electroni panel                                     |             |                  |               |                         |         |
| Tank                             |   |             |                  |               |                         |         |
| Plate with electrical components |   |             |                  |               |                         |         |
| Guard                            |   |             |                  |               |                         |         |

Used oil and materials must be disposed of according to 75/439/EEC and 87/101/EEC Directives and to country specific regulations.

The disposal of electrical components is provided for by European Directives 2002/95/CEE and 2002/96/CEE.

## 12. LIST OF SPARE PARTS




| POS. | DESCRIPTION                            | CODE   | Q.TY |
|------|--|--------|------|
| 1    | Bow                                    | 006/35 | 1    |
| 2    | Bow guard                              | 047/35 | 1    |
| 3    | HH screw M12x25 DIN933                 | 239/95 | 1+1  |
| 4    | Washer as drawing ø 45x12,5x6          | 040/06 | 2    |
| 5    | Snap ring D.72 I DIN 472               | 426/95 | 1    |
| 6    | Cylinder bracket bushing               | 070/38 | 1+1  |
| 7    | Idle pulley spacer                     | 022/35 | 1    |
| 8    | Bearing 6207 2RS                       | 103/32 | 2    |
| 9    | Idle pulley                            | 009/35 | 1    |
| 10   | Blade tightener pin                    | 037/35 | 1    |
| 11   | Grub screw M6x12 DIN 913               | 052/95 | 2    |
| 12   | HSHC screw M8x16 DIN 912               | 151/95 | 6    |
| 13   | Blade tightener guide plate            | 046/32 | 2    |
| 14   | HSHC screw M4x30 DIN 912               | 126/95 | 2    |
| 15   | Blade tightener screw                  | 039/32 | 1    |
| 16   | Washer D.10 DIN 125/A                  | 005/95 | 1    |
| 17   | Clamping lever M10x40                  | 061/35 | 1    |
| 18   | Mobile sawblade guide fastening plate  | 018/35 | 1    |
| 19   | Rear guard                             | 042/38 | 1    |
| 20   | Micro ERSCE E 100 01 S5I               | 030/90 | 1    |
| 21   | Bearing vice flange                    | 020/31 | 1    |
| 22   | End stroke plate                       | 083/35 | 1    |
| 23   | Blade tightener bush                   | 041/38 | 1    |
| 24   | Casing AXK 20 35                       | 109/32 | 1    |
| 25   | Thrust bearing AS 20 35                | 108/32 | 2    |
| 26   | Belleville washer 40x20,4x1,5 DIN 2093 | 458/95 | 17   |
| 27   | Spring pin D.8x36 DIN 1481             | 330/95 | 1    |
| 28   | Blade tightener handwheel              | 058/35 | 1    |
| 29   | Eye tie rod M12x50                     | 035/38 | 2    |
| 30   |  |        |      |
| 31   | Medium nut M8 DIN934                   | 014/95 | 1+1  |
| 32   | Band M42 2450x27x0.9 Z5/8              | 050/75 | 1    |
| 33   | Rotating pin nut                       | 027/38 | 1    |
| 34   | Push micro plate                       | 072/35 | 1    |
| 35   | HH screw M12x25 DIN 933                | 239/95 | 1+1  |
| 36   |  |        |      |
| 37   | HSHC screw M6x12 DIN 912               | 137/95 | 2+2  |
| 38   | Reduction unit MV 63 FC 1/19           | 021/38 | 1    |
| 39   | Motor M90L V400/50 8/4P HP1/1,5        | 122/80 | 1    |
| 40   | Vice screw spacer                      | 085/38 | 1    |
| 41   | Snap ring RS-15 DIN 6799               | 430/95 | 1    |
| 42   | HSHC screw M6x25 DIN 912               | 142/95 | 2    |
| 43   | Washer D.6 UNI7064                     | 611/95 | 2    |
| 44   | Washer D.6 DIN 125/A                   | 003/95 | 2+2  |
| 45   | Medium nut M6 DIN934                   | 011/95 | 2    |
| 46   | Microswitch E-100-00 BI                | 023/90 | 1    |
| 47   | HH screw M8x14 DIN933                  | 211/95 | 1+1  |
| 48   | Bearing 6208 2RS                       | 016/38 | 1    |
| 49   | Washer D.10 DIN 125/A                  | 005/95 | 4    |
| 50   | Medium nut M10 DIN 934                 | 017/95 | 4    |
| 51   | HSHC screw M8x14 DIN912                | 153/95 | 1+1  |
| 52   | HH screw M10x25 DIN 933                | 225/95 | 4    |
| 53   | Microswitch E-100-00-AI                | 022/90 | 1    |
| 54   | Key 10x8x20 DIN 6885A                  | 377/95 | 1    |
| 55   | Motor pulley                           | 008/35 | 1    |
| 56   | Washer                                 | 053/31 | 1    |
| 57   | HSHC screw M8x16 DIN912                | 155/95 | 2    |
| 58   | HSFHC screw M8x20 DIN 7991             | 259/95 | 2    |
| 59   | HSHC screw M8x25 DIN912                | 158/95 | 3    |
| 60   | Mobile blade guide rod                 | 023/35 | 1    |
| 61   | HSFHC screw M8x20 DIN 7991             | 259/95 | 1    |
| 62   | Vice bush                              | 023/34 | 1    |

|     |   |          |       |
|-----|---|----------|-------|
| 63  | Front blade-guide guard                 | 071/38   | 1     |
| 64  | HH screw M8x25 DIN 933                  | 214/95   | 4     |
| 65  | Blade guide tap                         | 030/96   | 1     |
| 66  | Front blade guide                       | 026/35   | 1     |
| 67  | Grub screw M8x16 DIN 913                | 056/95   | 1+1   |
| 68  | Blade guide plate                       | 044/35   | 2+2   |
| 69  | HSHC screw M6x25 DIN 912                | 142/95   | 2     |
| 70  | Washer D.6 DIN 125/A                    | 003/95   | 1+1   |
| 71  | Bearing 608 2RS                         | 055/35   | 1+1   |
| 72  | Blade guide eccentric bush              | 027/35   | 1+1   |
| 73  | Microswitch holder                      | 015/34   | 1     |
| 74  | Rear blade guide                        | 025/35   | 1     |
| 75  | HSHC screw M10x20 DIN 912               | 175/95   | 2     |
| 76  | Hexagon socket grub screw M8x30 DIN 914 | 087/95   | 1     |
| 77  | Rotation pin                            | 021/34   | 1     |
| 78  | Bearing 32008 XA                        | 072/20   | 2     |
| 79  | Nut M12 DIN 936                         | 019/95   | 1     |
| 80  | HH screw M10x120 DIN 933                | 237/95   | 1     |
| 81  | Stop microswitch bush                   | 047/38   | 1     |
| 82  | Cover box                               | 030/34   | 1     |
| 83  | Seegering D 40 DIN 471                  | 412/95   | 2     |
| 84  | Control box                             | 029/34   | 2     |
| 85  | Control box support bracket             | 020/34   | 1     |
| 86  | Positioning pin                         | 002-B/35 | 1     |
| 87  | Sphere D.30 F.M. 10                     | 082/14   | 1     |
| 88  | Anchor spring bracket                   | 014/34   | 1     |
| 89  | Return spring                           | 019/33   | 1     |
| 90  | Spring pin                              | 068/38   | 1     |
| 91  | HSFHC screw M6x8 DIN 7991               | 252/95   | 2     |
| 92  | Fixed blade-guide guard                 | 071-D/38 | 1     |
| 93  | Fixing counter-vice bracket             | 011/34   | 1     |
| 94  | Knob rod                                | 035/32   | 1     |
| 95  | Knob                                    | 046/05   | 1     |
| 96  | Microswitch AH 715079                   | 028/90   | 1     |
| 97  | Antigrease ring                         | 020/35   | 1     |
| 98  | Rear movable blade-guide guard          | 071-A/38 | 1     |
| 99  | HH screw M8x30 DIN933                   | 215/95   | 1     |
| 100 | Hub flange                              | 003/34   | 1     |
| 101 | Base                                    | 001/34   | 1     |
| 102 | Washer D.6 DIN 125/A                    | 003/95   | 2     |
| 103 | Hub                                     | 002/34   | 1     |
| 104 | Crucible                                | 002-A/34 | 1     |
| 105 | Motor pump SC/85                        | 090/90   | 1     |
| 106 | Regulator box                           | 099/14   | 1     |
| 107 | Bow support                             | 005/34   | 1     |
| 108 | Cylinder bracket                        | 016/34   | 1     |
| 109 | Rotating arm                            | 004/34   | 1     |
| 110 | HSHC screw M8x20 DIN 912                | 157/95   | 2     |
| 111 | Counter vice pin                        | 010/34   | 1     |
| 112 | Hinge + pin                             | 041/39   | 1     |
| 113 | Bench lever                             | 062/32   | 1     |
| 114 | Bench lever nut                         | 027/04   | 1     |
| 115 | Countervice                             | 006/34   | 1     |
| 116 | Bar stop rod                            | 031/05   | 1     |
| 117 | Cutting angle device                    | A        | 1     |
| 118 | Bar stop                                | 004/05   | 1     |
| 119 | Nut M16 DIN936                          | 025/95   | 1     |
| 120 | Regulator                               | 100/38   | 1     |
| 121 | Handwheel D.40 4L M8x20                 | 077/25   | 2     |
| 122 | Hexagon socket grub screw M8x10 DIN 914 | 085/95   | 1+1   |
| 123 | HSHC screw M8x25 DIN 912                | 158/95   | 2+2   |
| 124 | Handwheel D.30 4L M6x10                 | 062/35   | 2     |
| 125 | Vice handwheel                          | 056/35   | 1     |
| 126 | Hex. socket grub screw M6x10 DIN 914    | 081/95   | 1+4+4 |
| 127 | Vice screw                              | 067/35   | 1     |

|     |                                   |        |       |
|-----|-----------------------------------|--------|-------|
| 128 | Washer D.8 DIN 125/A              | 004/95 | 1+1+4 |
| 129 | Vice spring                       | 021/31 | 1     |
| 130 | Fifth wheel AS 30 47              | 061/31 | 2     |
| 131 | Cage AxK 30 47                    | 060/31 | 1     |
| 132 | Vice                              | 005/33 | 1     |
| 133 | Bush                              | 018/34 | 1     |
| 134 | Oiler D.6                         | 490/95 | 1     |
| 135 | Vice lever                        | 022/34 | 1     |
| 136 | Hydraulic cylinder CSO            | 017/34 | 1     |
| 137 | Vice jaw                          | 009/34 | 1     |
| 138 | HH screw M8x40 DIN933             | 216/95 | 1     |
| 139 |                                   |        |       |
| 140 | HSHC screw M6x85 DIN 912          | 154/95 | 1     |
| 141 | Nut M8 DIN 934                    | 014/95 | 3+1   |
| 142 | Roller                            | 076/32 | 1     |
| 143 | Roller arm                        | 075/35 | 1     |
| 144 | Counter-vice big jaw              | 007/34 | 1     |
| 145 | Counter-vice small jaw            | 008/34 | 1     |
|     |                                   |        |       |
|     |                                   |        |       |
|     |                                   |        |       |
| 200 | Plate with electrical components  | 031/34 | 1     |
| 201 | Control panel                     | 073/35 | 1     |
| 202 | Fuse 10x38 gG 2A                  | 203/90 | 1     |
| 203 | Change over switch                | 012/90 | 1     |
| 204 | HSHC screw M4x6 DIN 912           | 120/95 | 2+2   |
| 205 | Transformer 20VA 0-230-400V 0-24V | 042/90 | 1     |
| 206 | Fitting GP 11                     | 214/90 | 1     |
| 207 | Fitting PG 13,5                   | 215/90 | 3     |
| 208 | On switch                         | 086/90 | 1     |
| 209 | HSHC screw M4x12 DIN 912          | 122/95 | 3     |
| 210 | OMEGA raceway (cm.10)             | 046/90 | 1     |
| 211 | OMEGA raceway (cm.17)             | 047/90 | 1     |
| 212 | Terminal CABUR CBD.2              | 222/90 | 22    |
| 213 | Earth terminal TE.6/0             | 223/90 | 2     |
| 214 | Screw TBEI M4x6 ISO 7380          | 280/95 | 2+2   |
| 215 | Remote controlled switch          | 032/90 | 1     |
| 216 | HSHC screw M5x8 DIN 912           | 128/95 | 3     |
| 217 | Earth connection bar with 5 holes | 050/90 | 1     |
| 218 | Thermal relay                     | 053/90 | 1     |
| 219 | Fuse block PCH 1x38               | 093/90 | 1     |
| 220 | Fuse block PCH 2x38               | 094/90 | 1     |
| 221 | Fuse 10x38 gG 1A                  | 202/90 | 2     |
| 222 | Electrical cable 2X1              | 003/77 | 1     |
| 223 | Screw TCTCR M2,9x13 DIN7981       | 294/95 | 6     |
| 224 | Contact                           | 200/90 | 1     |
| 225 | HSFHC screw M4x8 DIN7991          | 255/95 | 1     |
| 226 | Emergency button                  | 085/90 | 1     |
| 227 | Green warning light 24V           | 267/90 | 1     |
| 228 | Fitting GP 9                      | 213/90 | 7     |
| 229 | Selector                          | 100/90 | 1     |
|     |                                   |        |       |
|     |                                   |        |       |
|     |                                   |        |       |

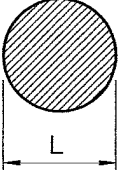
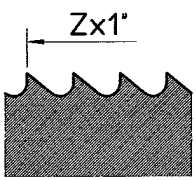
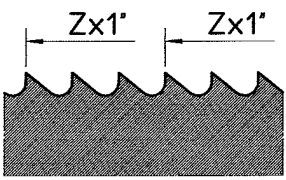
# CAPACITA' DI TAGLIO - CUTTING CAPACITY

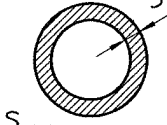
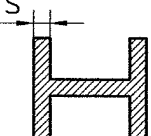
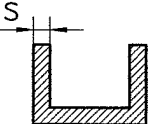
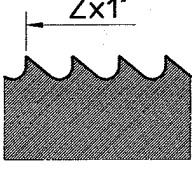
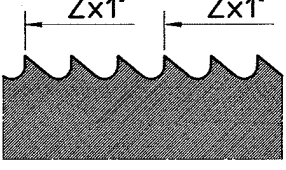
## SPECIAL 280 CS0

| CAPACITA' DI TAGLIO -<br>CUTTING CAPACITY - CAPACITE DE COUPE<br>SCHNITTKAPAZITAET - CAPACIDAD DE CORTE |  |  |  |
|---|---|--|---|
| 90°   | 220   | 215  | 250 x 155   |
| 45°   | 160   | 150  | 160 x 110   |
| 60°   | 100   | 85   | 80 x 95   |

## SCELTA DELLA LAMA - BLADE SELECTION

SCELTA DELLA LAMA  
SELECTION OF BLADE  
CHOIX DE LA LAME  
WAHL DES SAEGEBLATTS  
SELECCION DE LA HOJA

| <br>L | L mm   |  |  |
|---|--------|--|---|
|   | ≤ 40   | 8  | 6/10  |
|   | >30<80 | 6  | 5/8   |
|   | >60<90 | 4  | 4/6   |
|   | ≥ 100  | 3  | 3/4   |

| <br>S<br><br>S<br><br>S | S mm  |  |  |
|--|-------|--|---|
|  | ≤ 1,5 | 14   | -   |
|  | >1<2  | 10   | 10/14   |
|  | >2<4  | 8  | 8/12  |
|  | >4<8  | 6  | 6/10  |
|  | >6<12 | 6  | 5/8   |
|  | ≥ 12  | 4  | 4/6   |

|   |   |   |
|---|---|---|
| Velocità di taglio<br>La macchina è dotata di due velocità di taglio  |   | 32-66 m/1'  |
| Cutting machine<br>The machine is equipped with two cutting speeds  |   | 32-66 m/1'  |
| Vitesse de coupe<br>La machine est dotée de deux vitesses de coupe  |   | 32-66 m/1'  |
| Schnittgeschwindigkeit<br>Die maschine ist mit zwei Schnittgeschwindigkeiten ausgestattet                           |   | 32-66 m/1'  |
| Velocidad de corte<br>La maquina esta dotada de dos velocidades de corte  |   | 32-66 m/1'  |
| Materiale<br>Material<br>Materiel<br>Material<br>Material   |   | Velocità di taglio m/1'<br>Cutting machine m/1'<br>Vitesse de coupe m/1'<br>Schnittgeschwindigkeit m/1'<br>Velocidad de corte m/1'  |
| Acciai da costruzione<br>Structural steel<br>Aciers de construction<br>Baustahl<br>Acero de construccion            | Fe37+Fe42<br>Fe37+Fe42<br>Fe37+Fe42<br>Fe37+Fe42<br>Fe37+Fe42 | Pieni<br>Solid<br>Pleins<br>Volles Material<br>Pies<br>66<br>Profilati<br>Structural steel<br>Profilés<br>Profile<br>Perfiles<br>66 |
| Acciai da costruzione<br>Structural steel<br>Aciers de construction<br>Baustahl<br>Acero de construccion            | Fe50+Fe70<br>Fe50+Fe70<br>Fe50+Fe70<br>Fe50+Fe70<br>Fe50+Fe70 | 66  |
| Acciai al carbonio<br>Carbon steel<br>Aciers au carbone<br>Kohlenstoffstahl<br>Acero de carbono                     | C40+C60<br>C40+C60<br>C40+C60<br>C40+C60<br>C40+C60           | 66  |
| Acciai legati<br>Alloyed steel<br>Aciers allié<br>Legierter Stahl<br>Acero aleado                                   |   | 32  |
| Acciai inox<br>Stainless steel<br>Aciers inoxydables<br>Rostfreier Stahl<br>Acero inoxidable                        |   | 32  |
| Ghisa grigia<br>Grey cast iron<br>Fonte grise<br>Grauguß<br>Fundición gris  |   | 66  |
| Leghe d'alluminio<br>Alluminium alloys<br>Allieges d'aluminium<br>Legierungen aus Aluminium<br>Aleación de Aluminio |   | 66  |
| Bronzi<br>Bronze<br>Bronze<br>Bronze<br>Bronces   |   | 66  |



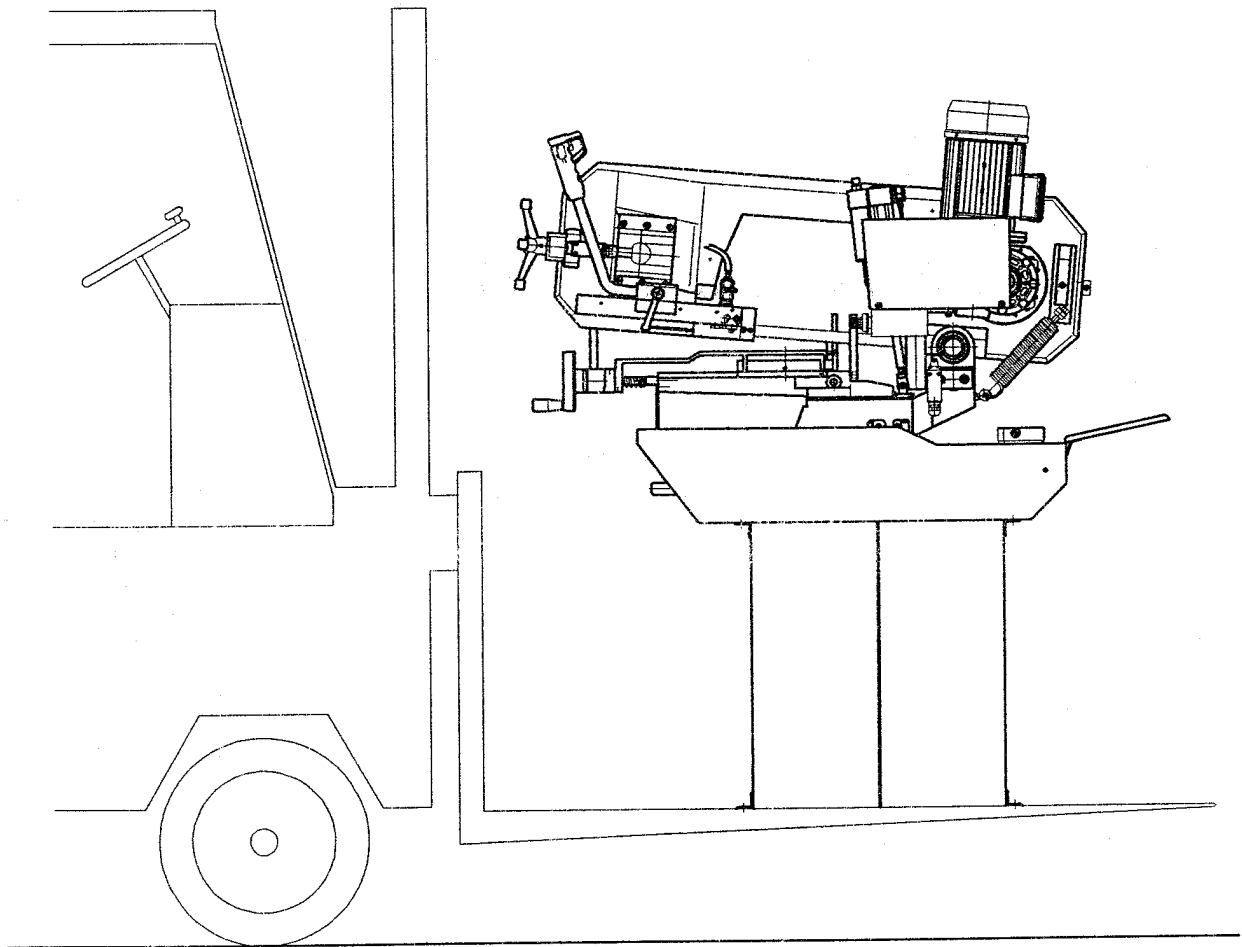
# MOVIMENTAZIONE E TRASPORTO

Handling and transportation

Manutention et transport

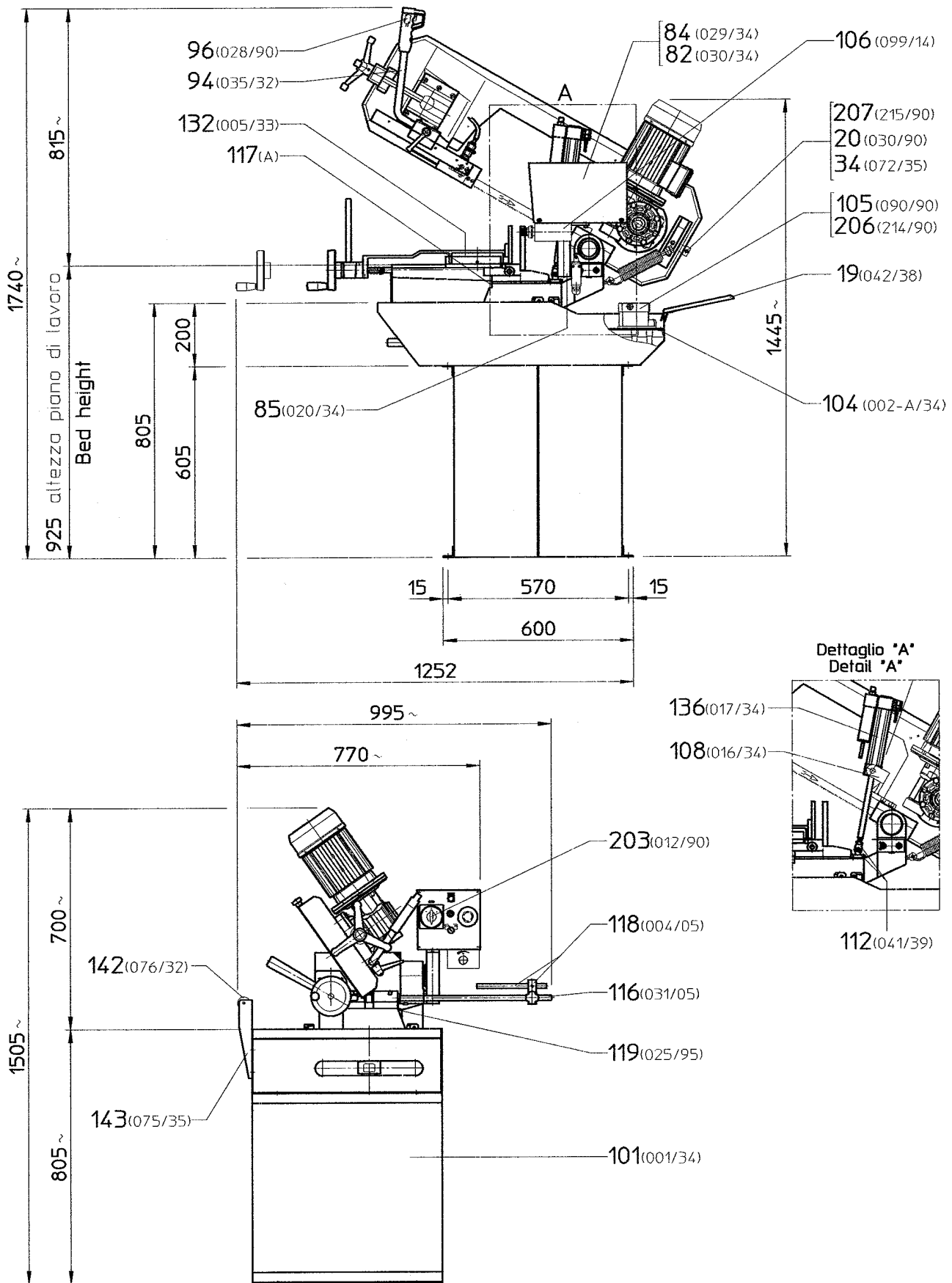
Handhabung und Transport

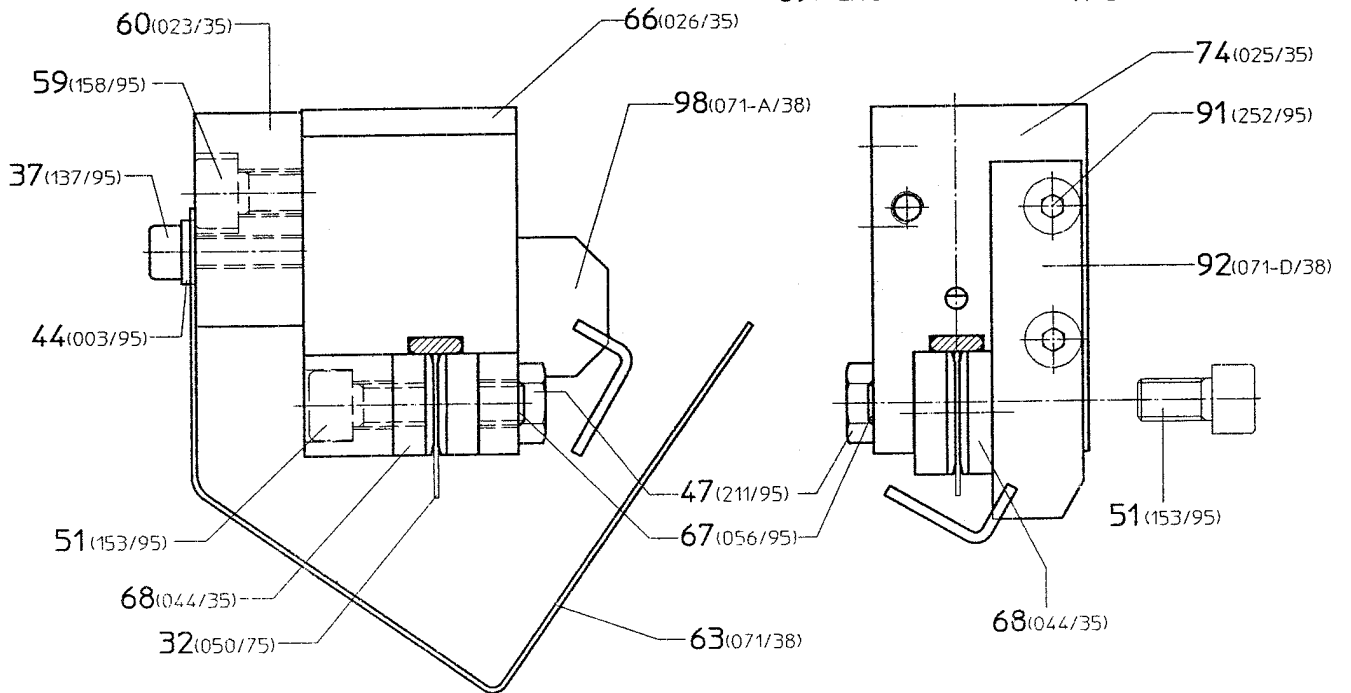
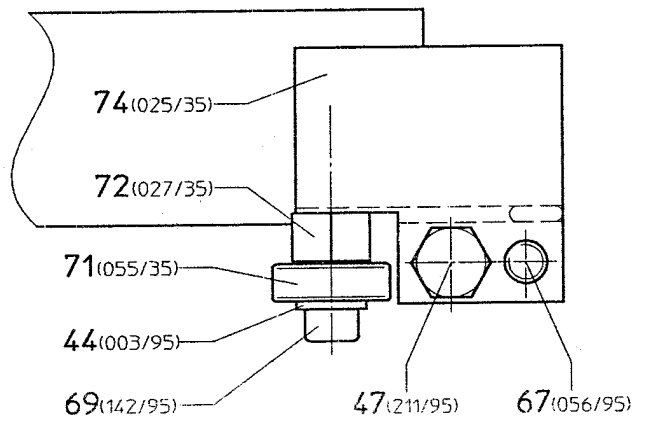
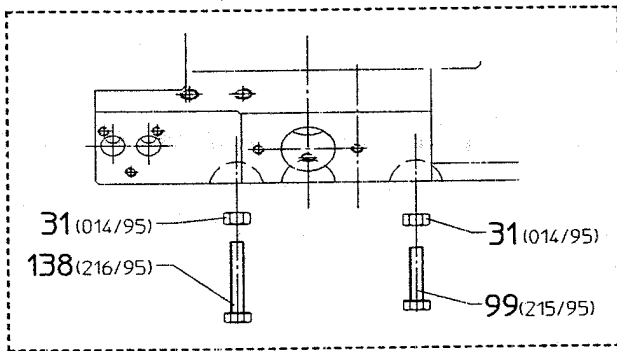
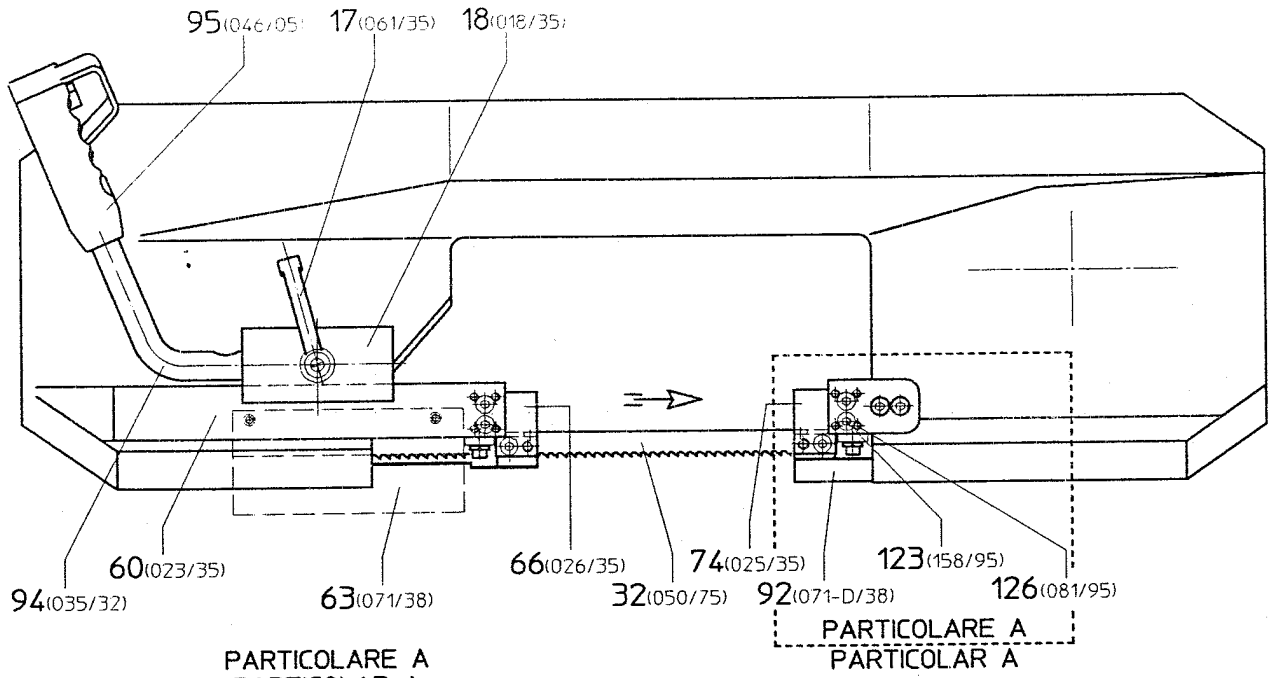
Movilizacion y transporte

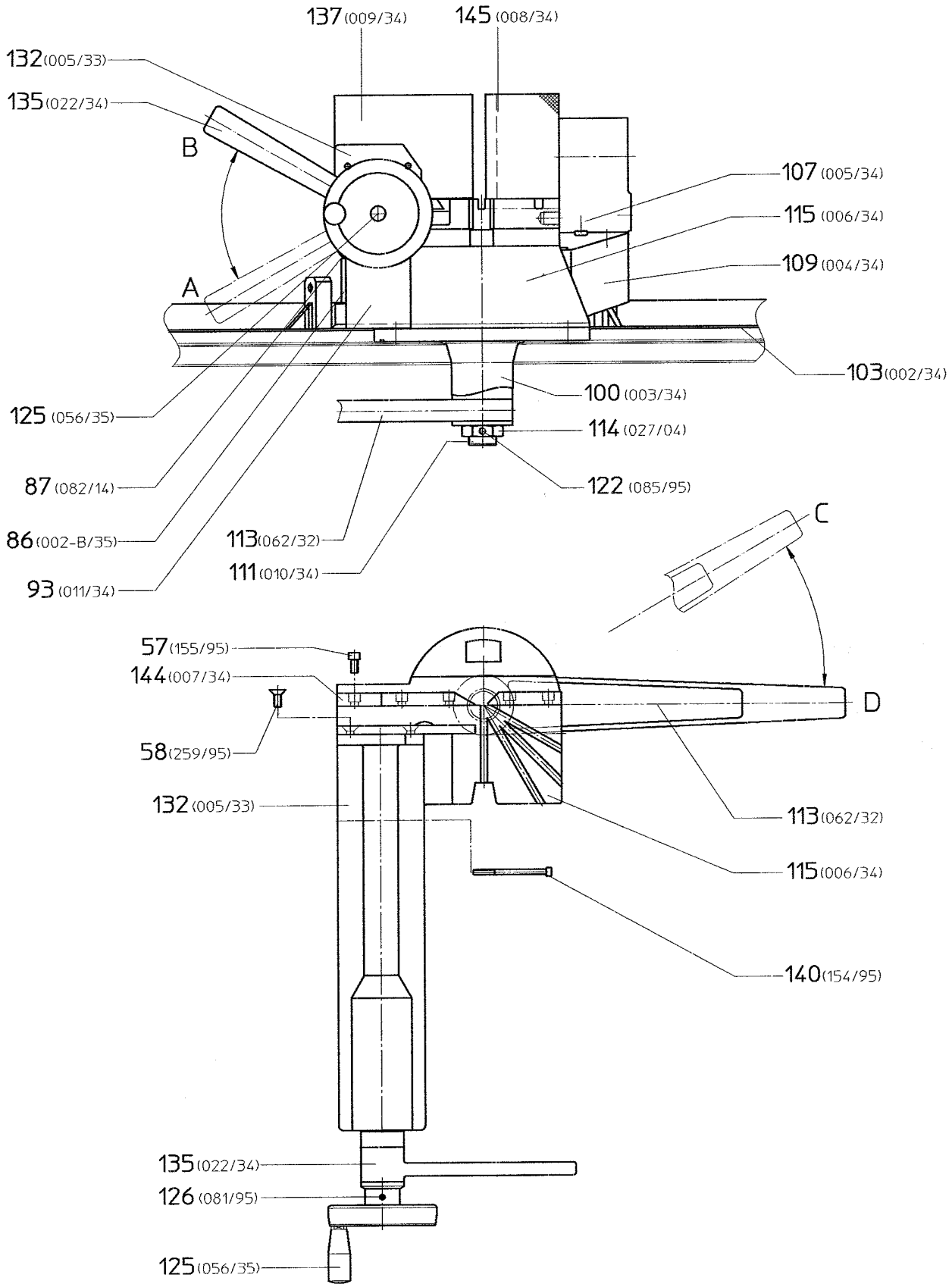


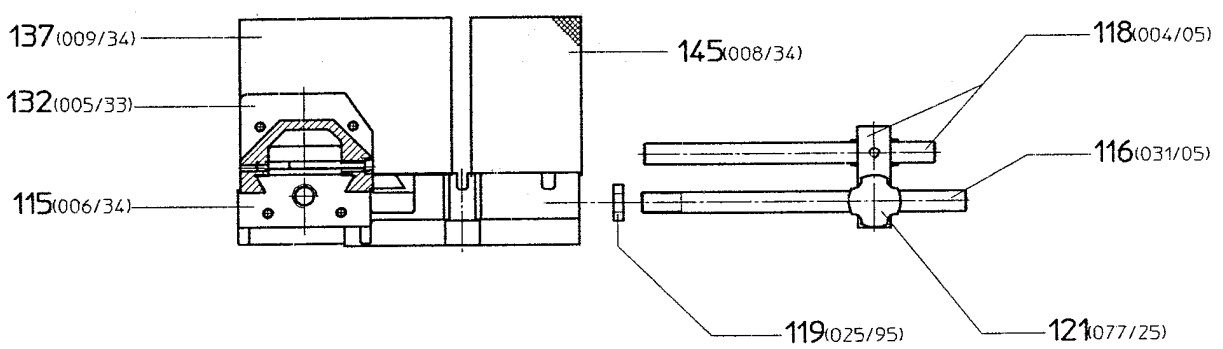
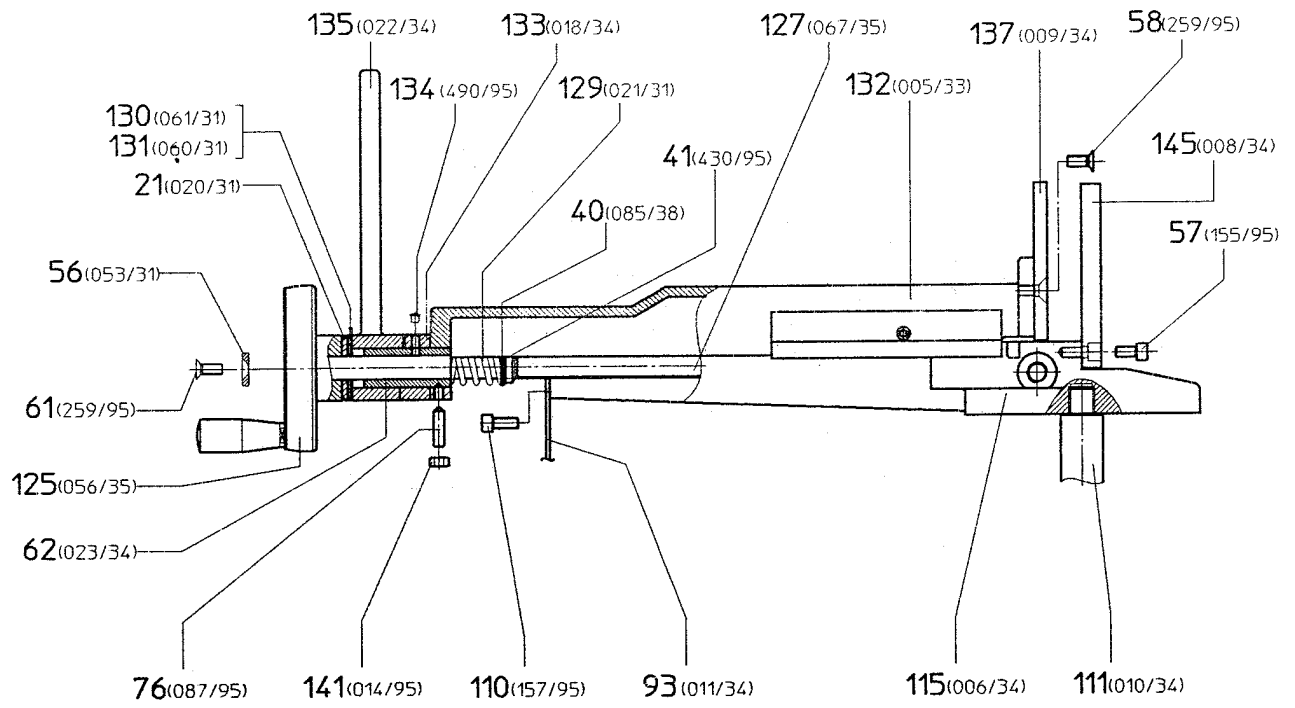
# DIMENSIONI D'INGOMBRO E INSTALLAZIONE

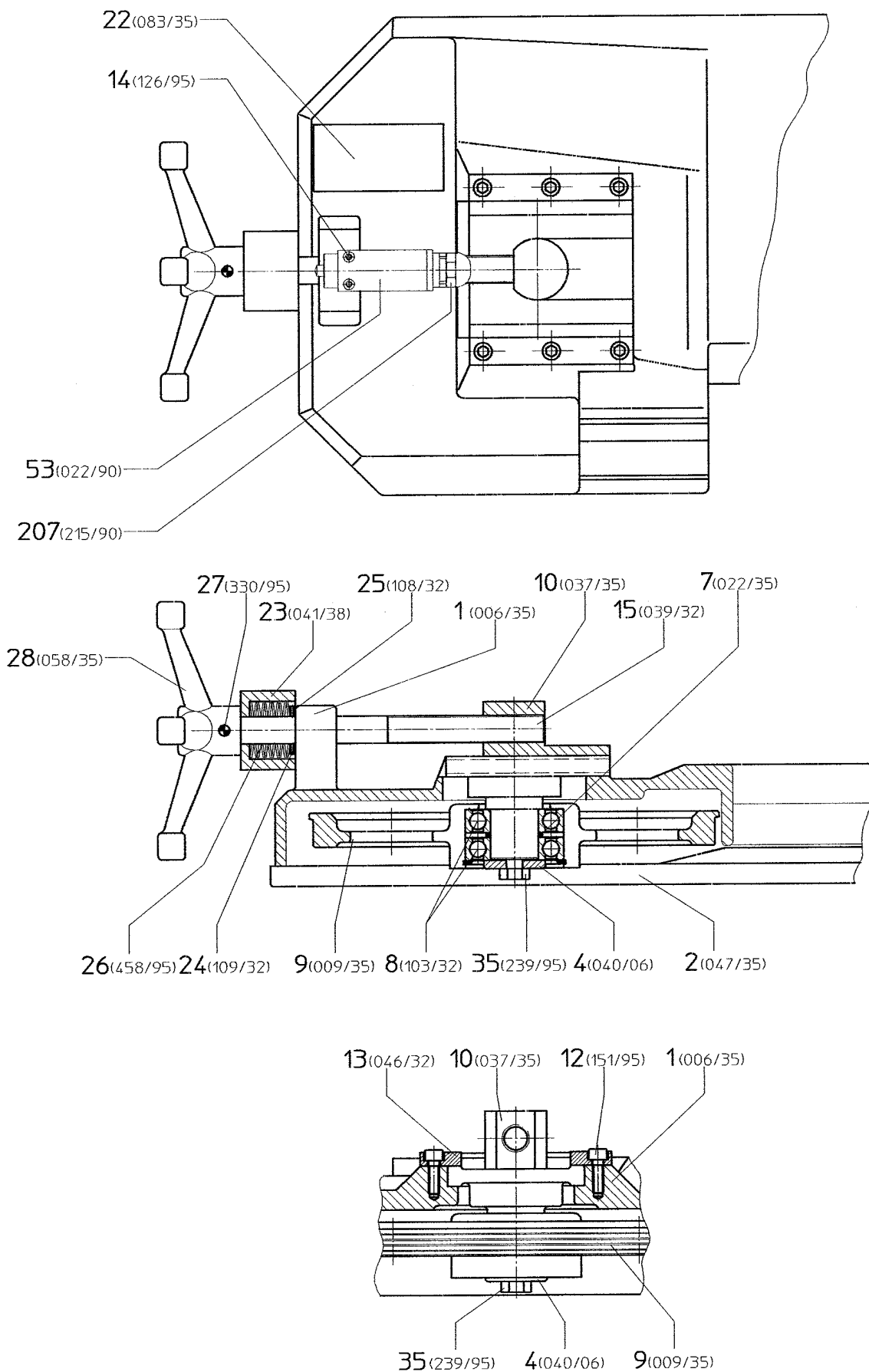
Overall dimensions and installation  
 Dimensions hors-tout et installation  
 Aussenabmessungen und Installation  
 Dimensiones maximas extremas e instalacion

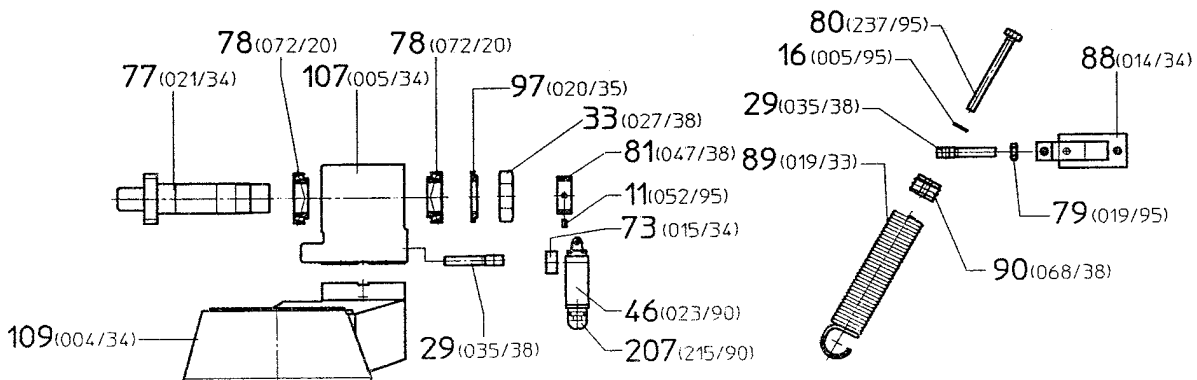
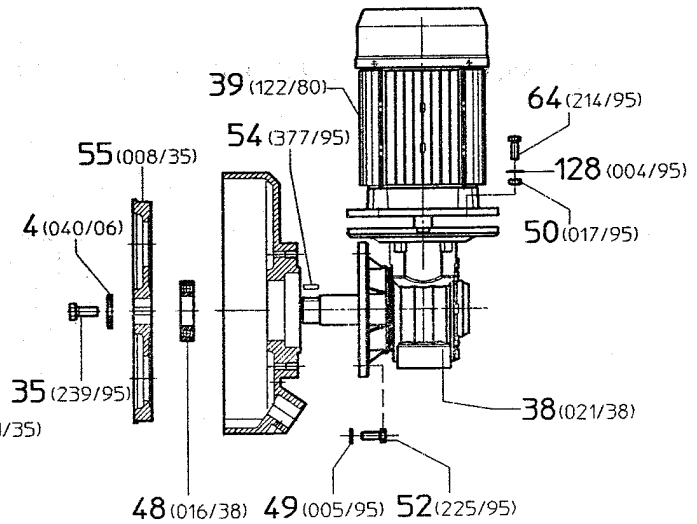
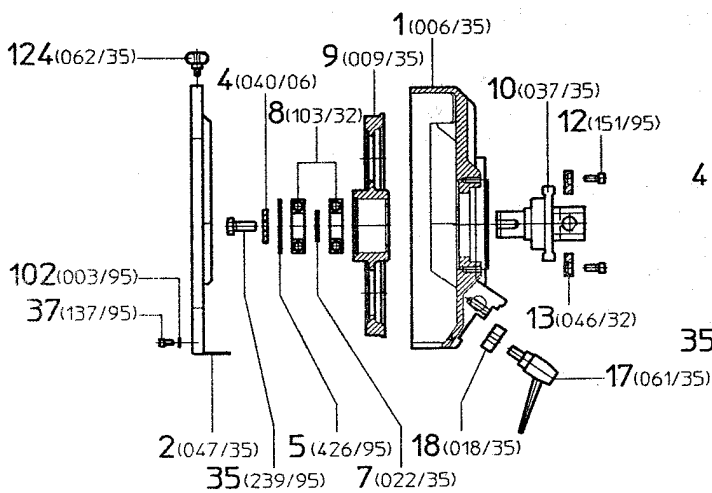
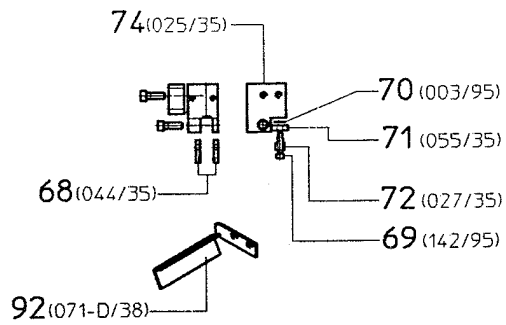
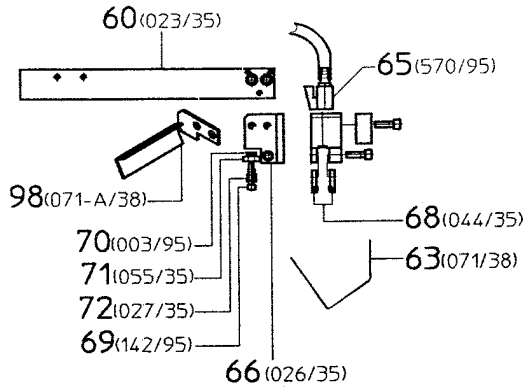
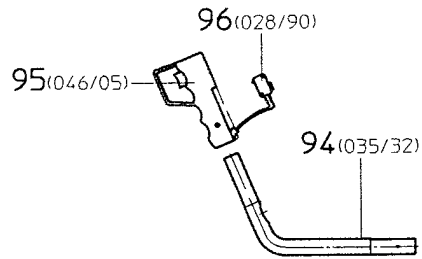
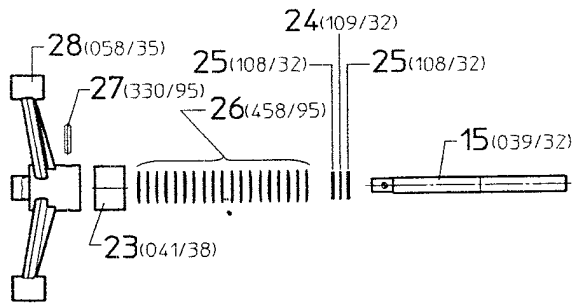


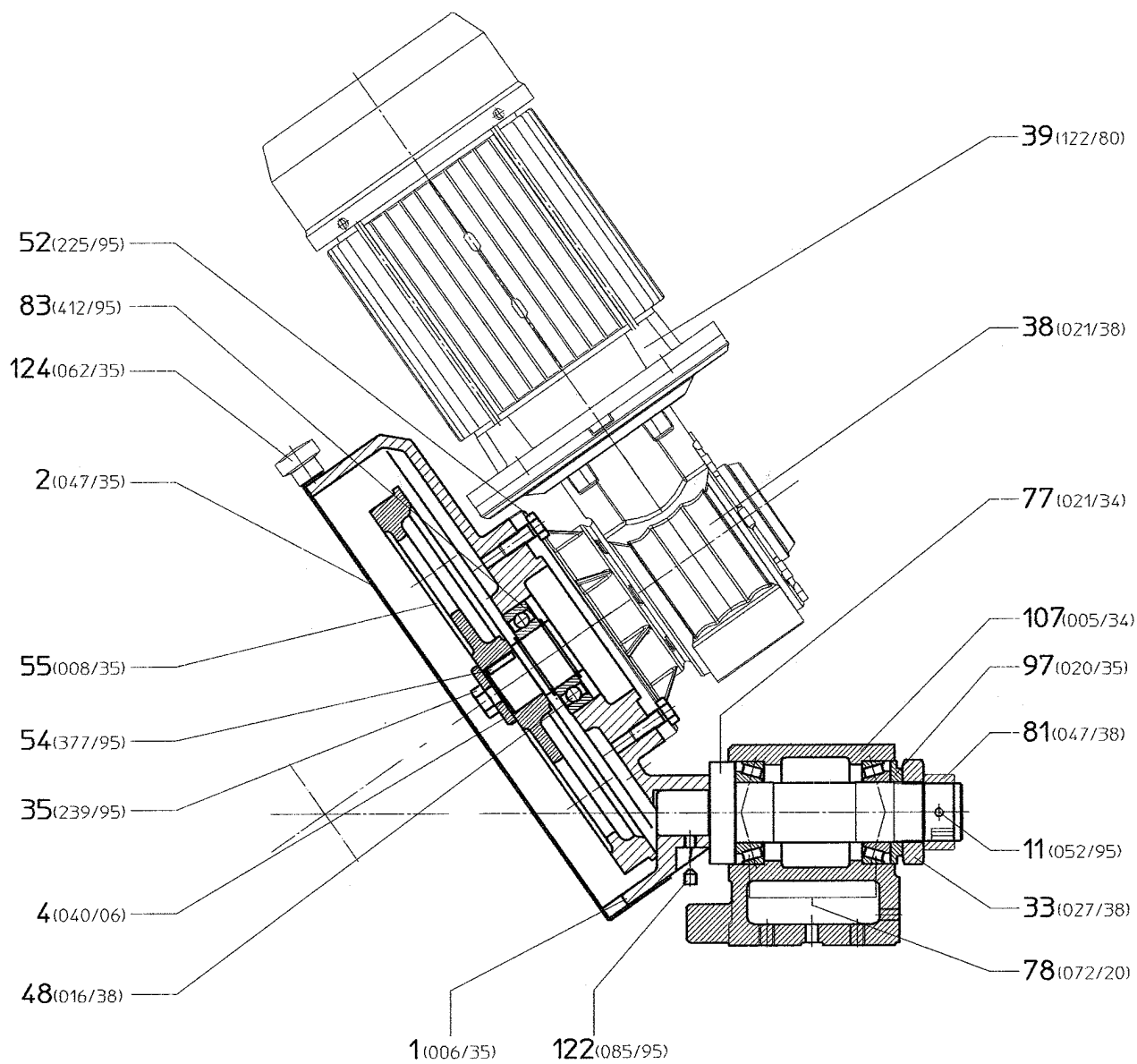






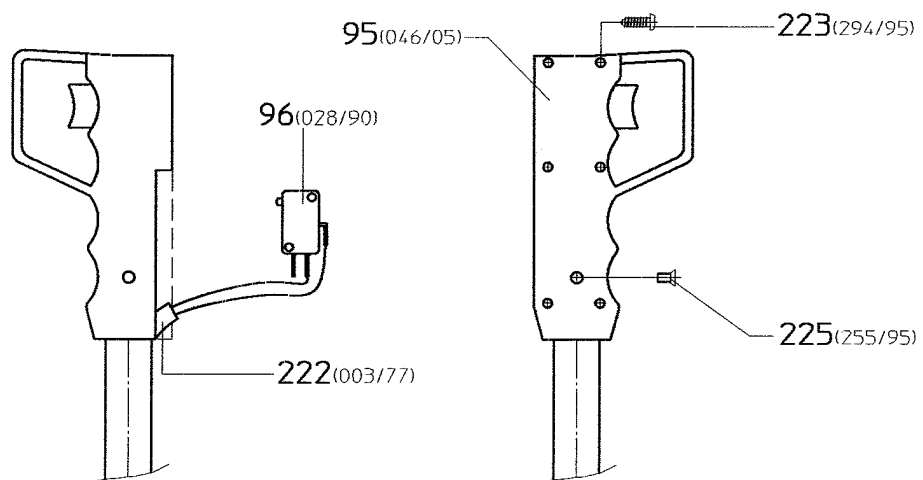
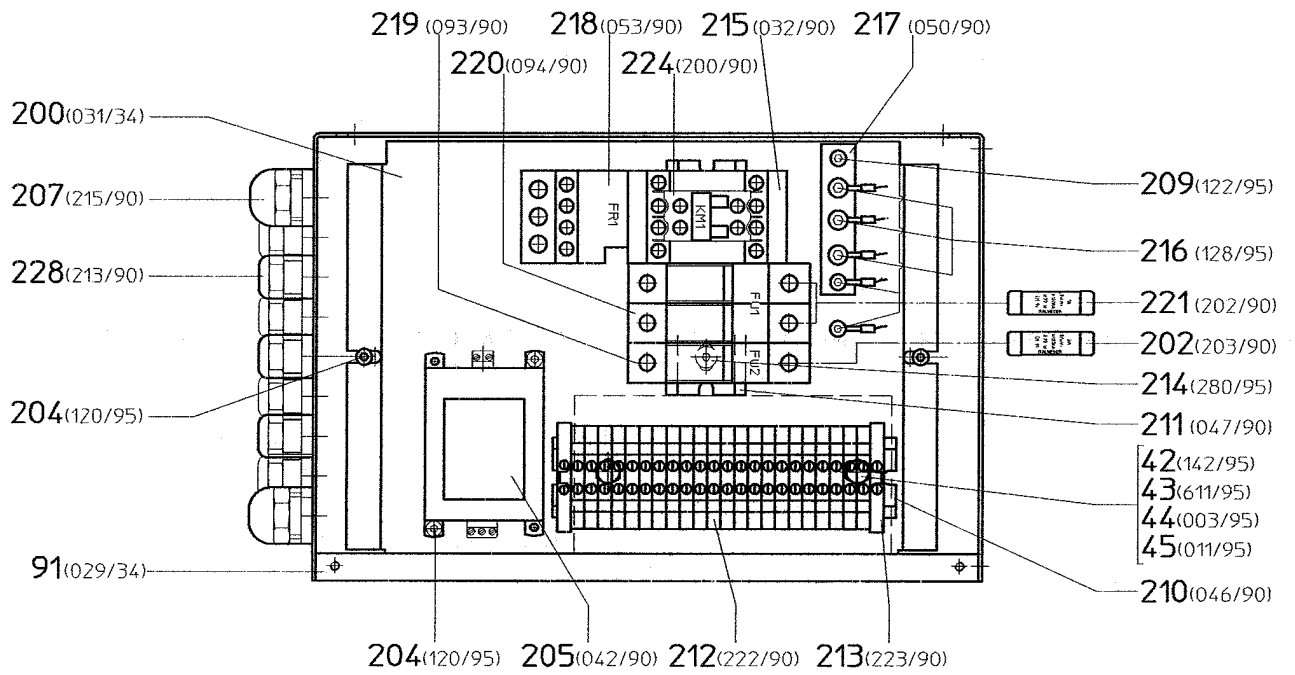
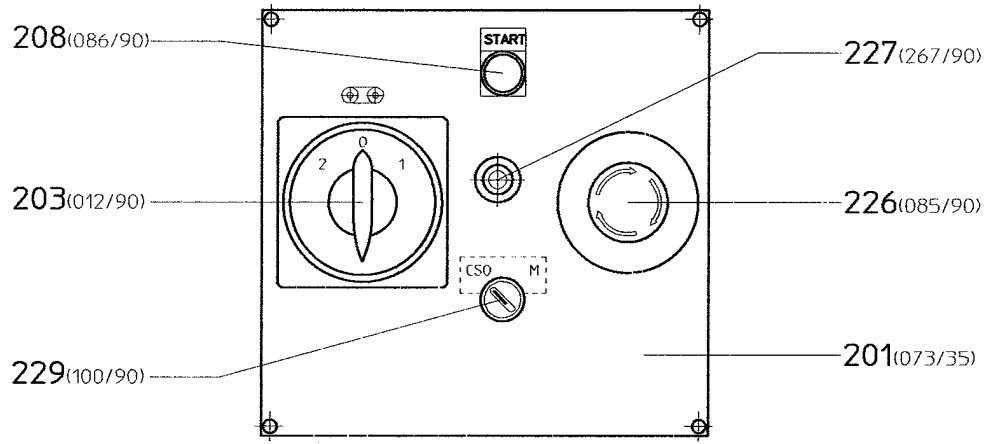


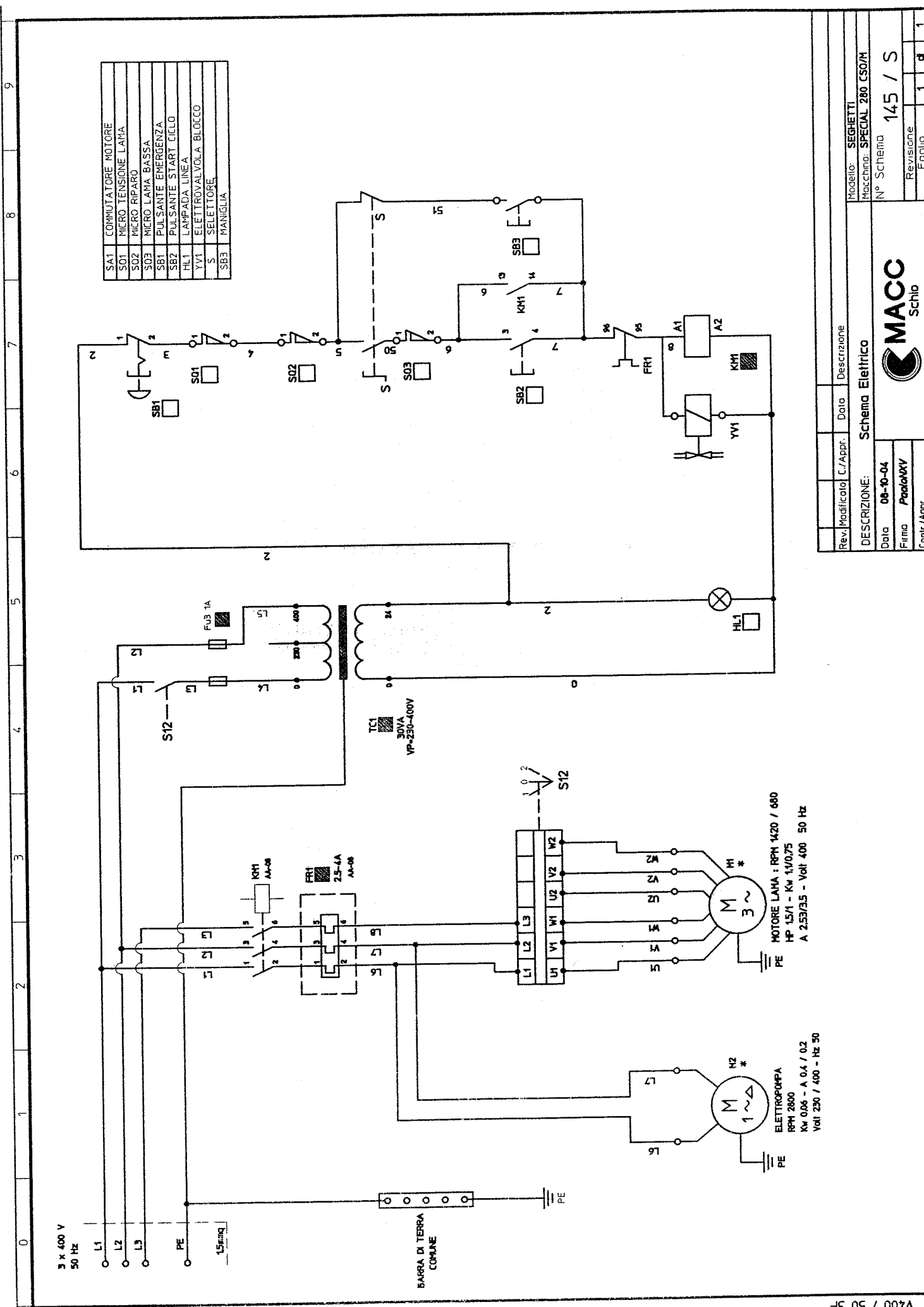




Allegato / Encl. 5 - Dis. / Draw. 9



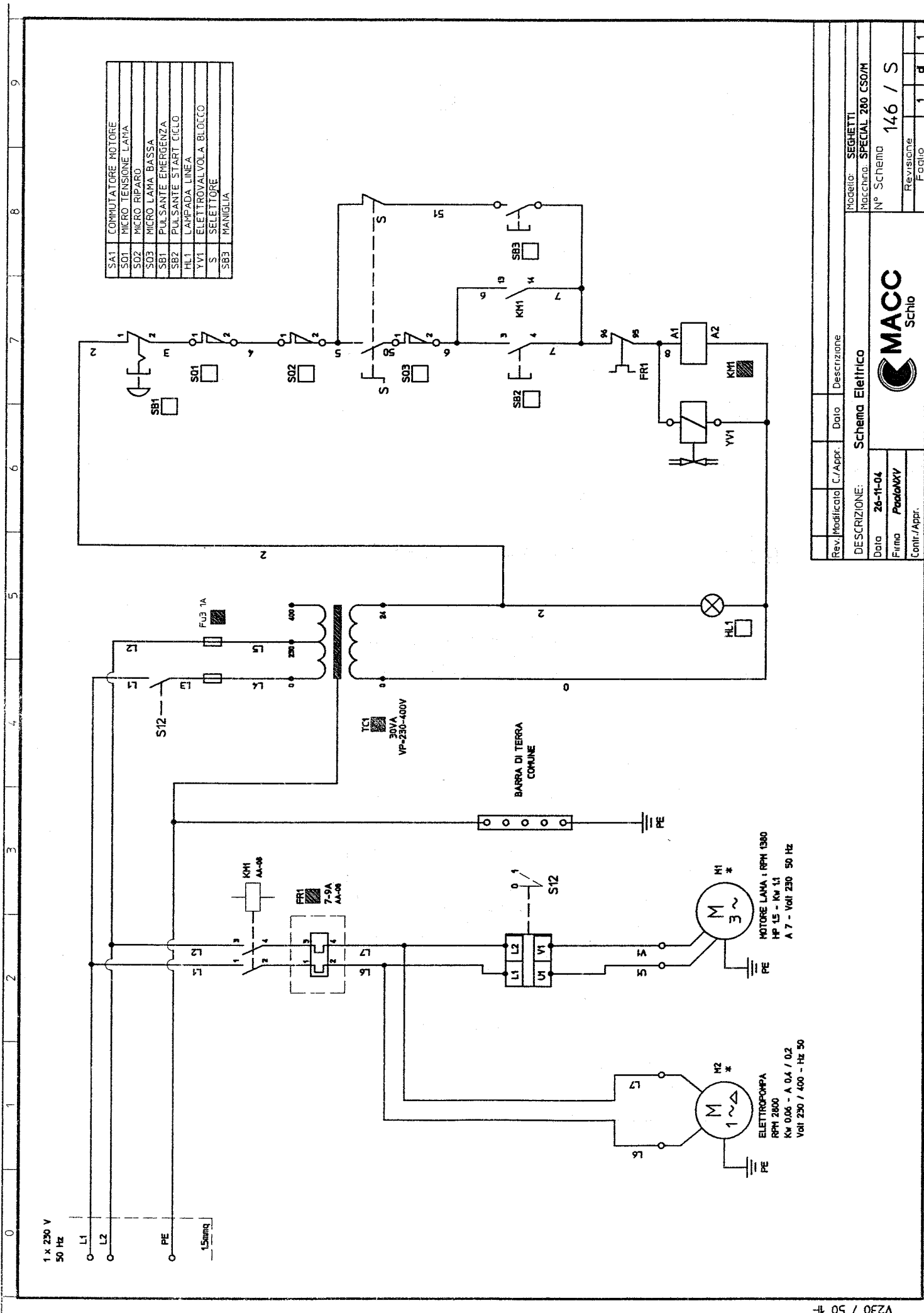




|     |                       |
|-----|-----------------------|
| SA1 | COMUTATORE MOTORE     |
| SO1 | MICRO TENSIONE LAMA   |
| SO2 | MICRO RIPARO          |
| SO3 | MICRO LAMA BASSA      |
| SB1 | PULSANTE EMERGENZA    |
| SB2 | PULSANTE START CICLO  |
| HL1 | LAMPADA LINEA         |
| YV1 | ELETTROVALVOLA BLOCCO |
| S   | SELETTORE             |
| SB3 | MANIGLIA              |

|                               |                   |       |             |
|-------------------------------|-------------------|-------|-------------|
| Rev. Modificato               | C./Appr.          | Data  | Descrizione |
| DESCRIZIONE: Schema Elettrico |                   |       |             |
| Data                          | 08-10-04          | Firma | Paolo M.V.  |
| Contr./Appr.                  |                   |       |             |
| Modello                       | SEGHETTI          |       |             |
| Macchina                      | SPECIAL 280 CSO/M |       |             |
| N° Schema                     | 145 / S           |       |             |
| Revisione                     | 1                 | d     | 1           |
| Foglio                        | 1                 | d     | 1           |

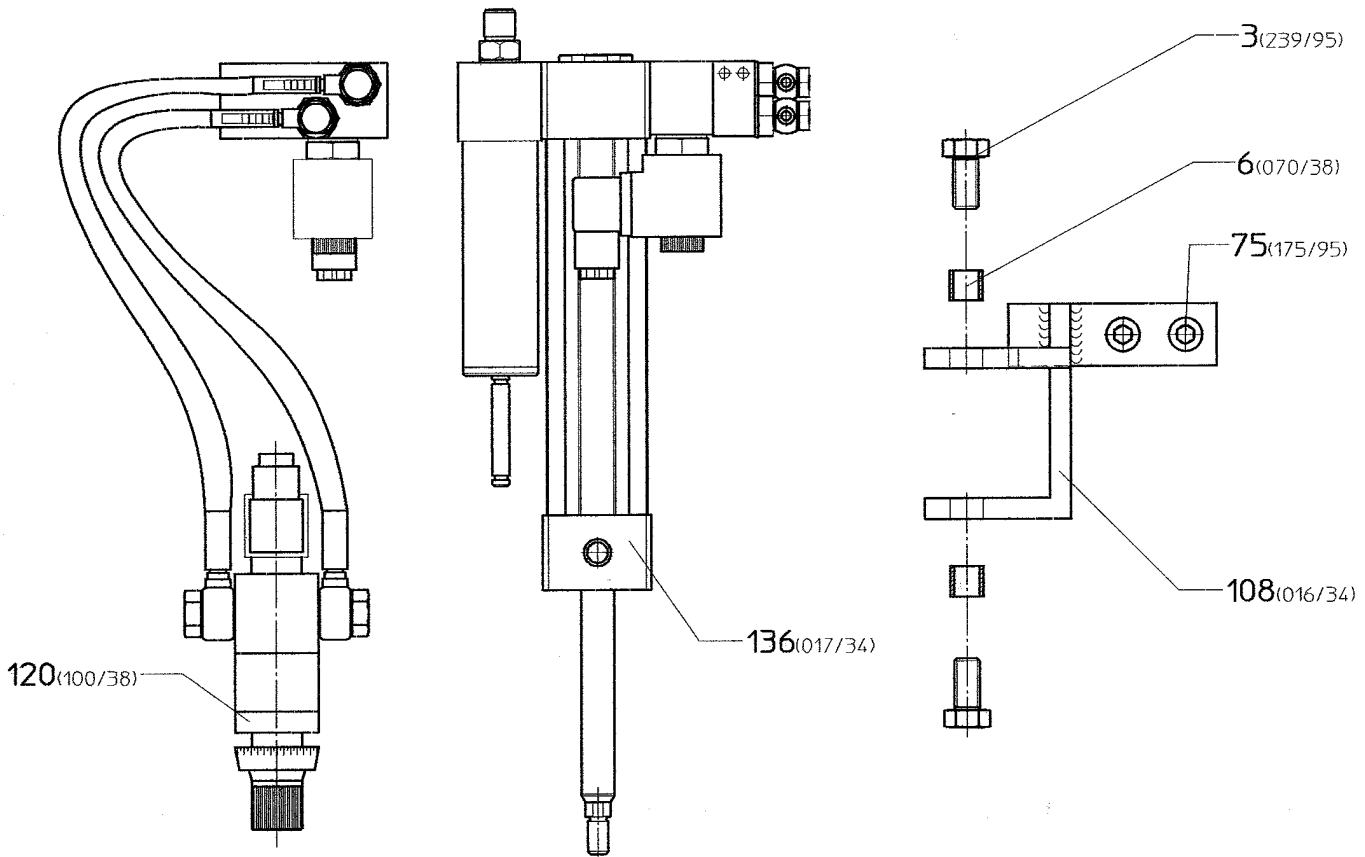




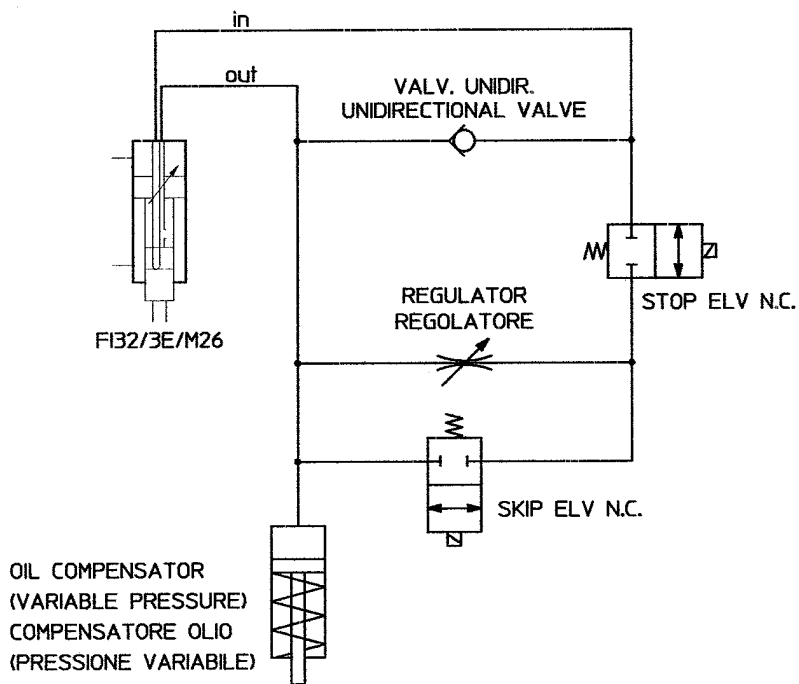
|     |                       |
|-----|-----------------------|
| SA1 | COMUTATORE MOTORE     |
| SO1 | MICRO TENSIONE LAMA   |
| SO2 | MICRO RIPARO          |
| SO3 | MICRO LAMA BASSA      |
| SB1 | PULSANTE EMERGENZA    |
| SB2 | PULSANTE START CICLO  |
| HL1 | LAMPADA LINEA         |
| YV1 | ELETTROVALVOLA BLOCCO |
| S   | SELETTORE             |
| SB3 | MANIGLIA              |

|                               |            |          |      |             |
|-------------------------------|------------|----------|------|-------------|
| Rev.                          | Modificata | C./Appr. | Data | Descrizione |
| DESCRIZIONE: Schema Elettrico |            |          |      |             |
| Modello: SEGHETTI             |            |          |      |             |
| Macchina: SPECIAL 200 CSO/M   |            |          |      |             |
| N° Schema: 146 / S            |            |          |      |             |
| Firma: PaoloXXV               |            |          |      |             |
| Contr./Appr.:                 |            |          |      |             |
| Revisione: 1                  |            |          |      |             |
| Pagina: 1                     |            |          |      |             |





SCHEMA IDRAULICO  
IDRAULIC DIAGRAM



CONTROLLATO 12 APR. 2007

REV. 0