



- SOLLEVAMENTO
- LIFTING
- LEVAGE
- LEVANTAR LA MÁQUINA
- ПОДЪЕМ МАШИНЫ

- PODNOSZENIE
- ANHEBEN

N° 016277110

1

- LA MACCHINA È CORREDATA DI APPOSITE STAFFE SOLLEVAMENTO PER LA CORRETTA IMBRACATURA. NON AGGANCIARE LA MACCHINA PER SPOSTAMENTI IN ALTRI PUNTI SE NON QUELLI INDICATI.

- LA MANOVRA DEGLI APPARECCHI DI SOLLEVAMENTO È RISERVATA AL PERSONALE AUTORIZZATO.

- L'OPERATORE È RESPONSABILE DEL CORRETTO USO DEL MEZZO DI SOLLEVAMENTO E DEVE ATTENERSI SCRUPolosAMENTE ALLE DISPOSIZIONI DI SICUREZZA RELATIVE.

- THE DIECASTING MACHINE IS EQUIPPED WITH SPECIAL LIFTING DEVICES FOR ITS CORRECT LIFTING. PLEASE, DO NOT USE ANY OTHER KINDS OF LIFTING MEANS.

- ONLY AUTHORIZED PERSONNEL CAN OPERATE THE LIFTING TOOLS.

- OPERATORS ARE RESPONSIBLE FOR THE CORRECT USE OF THE LIFTING TOOLS AND MUST SCRUPULOUSLY RESPECT THE SAFETY REGULATIONS THAT APPLY

- LA MACHINE A COULER L'ALLUMINIUM SOUS PRESSION EST EQUIPEE DE DEUX ETRIERES DE LEVAGE POUR SON ELINGAGE CORRECT. POUR LA DEPLACER, NE PAS ACCROCHER MACHINE DES POINTS AUTRES Q UE CEUX INDQUES.

- SEULEMENT AU PERSONNEL AUTORISÉ EST RÉSERVÉE LA MANOEUVRE DES APPAREILS DE LEVAGE.

- L'OPÉRATEUR EST RESPONSABLE DE L'USAGE APPROPRIÉ DU MOYEN DE LEVAGE ET DOIT SUIVRE SCRUPULEUSEMENT SES DISPOSITIONS DE SÉCURITÉ.

- DIE DRUGKGISSMASCHINE IST MIT SPEZIELLEM WERKZEUG ZUM KORREKTEN HEBEN AUSGERÜSTET.

ZUM VERSTELLEN DER MASCHINE DARF MAN NUR DIE ANGEGBENEN AUFHÄNGPOSITIONEN VERWENDEN.

- HEBEVORRICHTUNGEN DÜRFEN NUR VOM BEFUGTEN PERSONAL BEDIENT WERDEN.

- DIE BEDIENER SIND FÜR DEN KORREKTEN EINSATZ DER HEBEVORRICHTUNGEN VERANTWORTLICH UND MÜSSEN SICH SORGFÄLTIG AN DEN ZUTREFFENDEN VORSCHRIFTEN HALTEN.



ITALPRESSE

SETTING UP THE MACHINE FOR OPERATION

N° 016510000

1

MACHINE INSTALLATION AND FOUNDATION

So as to ensure proper operation and stability, the machine must rest on a solid foundation, built according to the FOUNDATION PLAN. The foundation may require a different thickness relative to the characteristics of the ground on which the machine will be located.

Lift the machine as shown in the enclosed drawing, (till IP1650) insert the screws in the special holes in the base, fasten them to the anchor bolts.

Fasten as well the reaction plates to the leveling screws.

(screws, anchor bolts and plates are not supplied with the machine).

Degrease and thoroughly clean with petrol the guides, columns and telescopes. Approximately level both longitudinally and transversally, then introduce cement mortar in the cavities containing the anchor bolts.

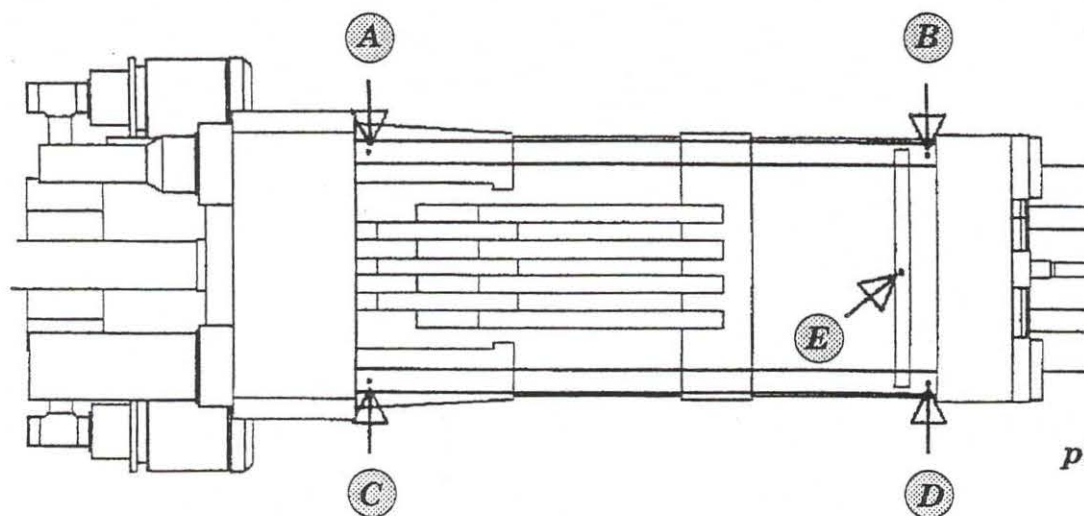
After the mortar in the cavities has settled, loosen the anchor bolt screws, fasten the leveling screws so that they rest on the plates (screws provided with the machine). Now level the machine carefully so as to fall within the following allowances: longitudinal flatness ± 0.1 (points "A+B+C+D" pict. 1) per 1000 mm. and transversal ± 0.15 (point "E" pict.1) per 1000 mm.

While leveling, make use of the reaction screws, taking care to tighten them equally; slightly fasten the anchor bolt screws by hand.

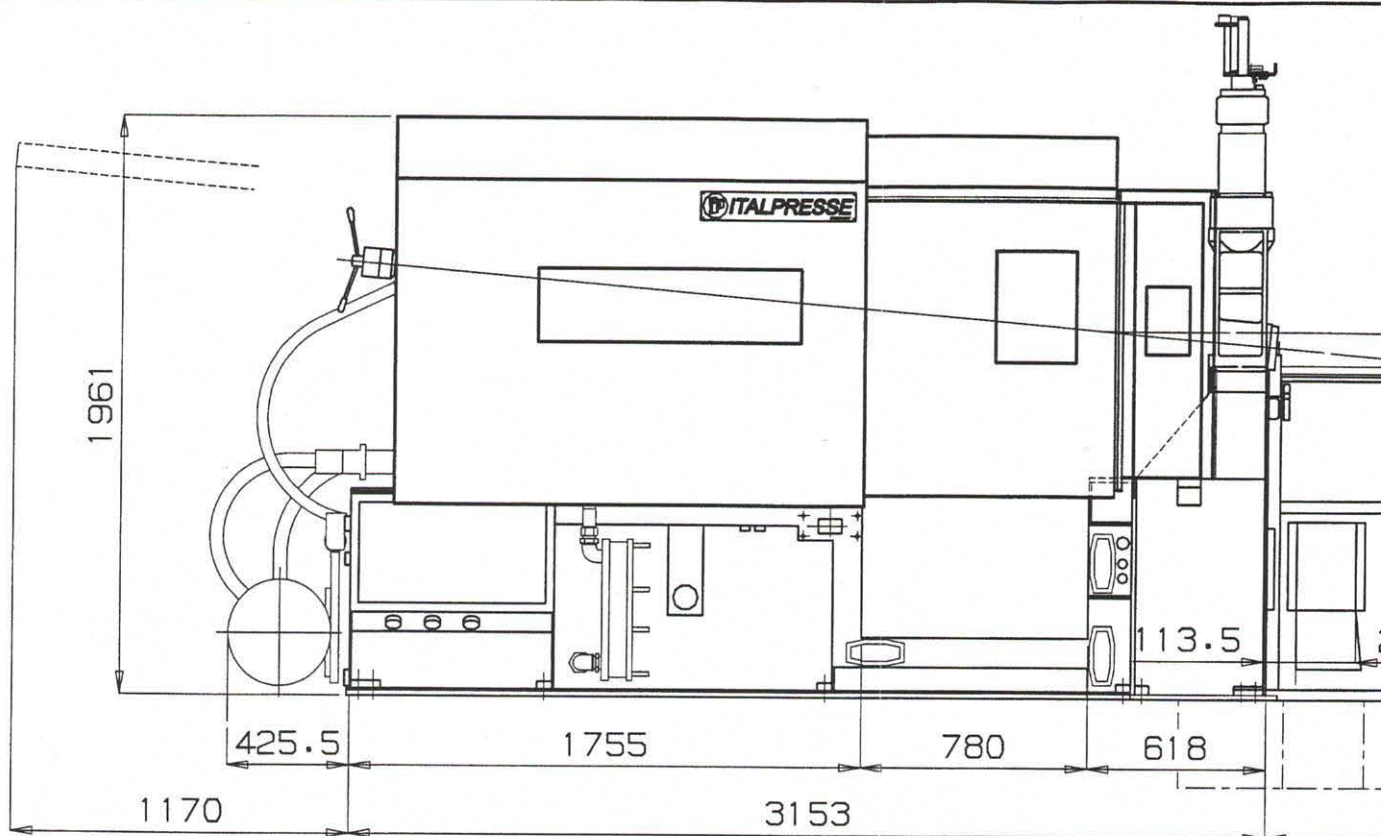
When the foundation has definitively hardened, thoroughly fasten the anchor bolts, checking for possible displacement caused by any settling of the foundation.

Connect the machine to the machine console by means of a cable of adequate size for its absorption, but yet can pass through the specially provided hole.

Besides the above mentioned operations, the cooling water and air connections must be seen to as described in the FOUNDATION PLAN.



pict. 1

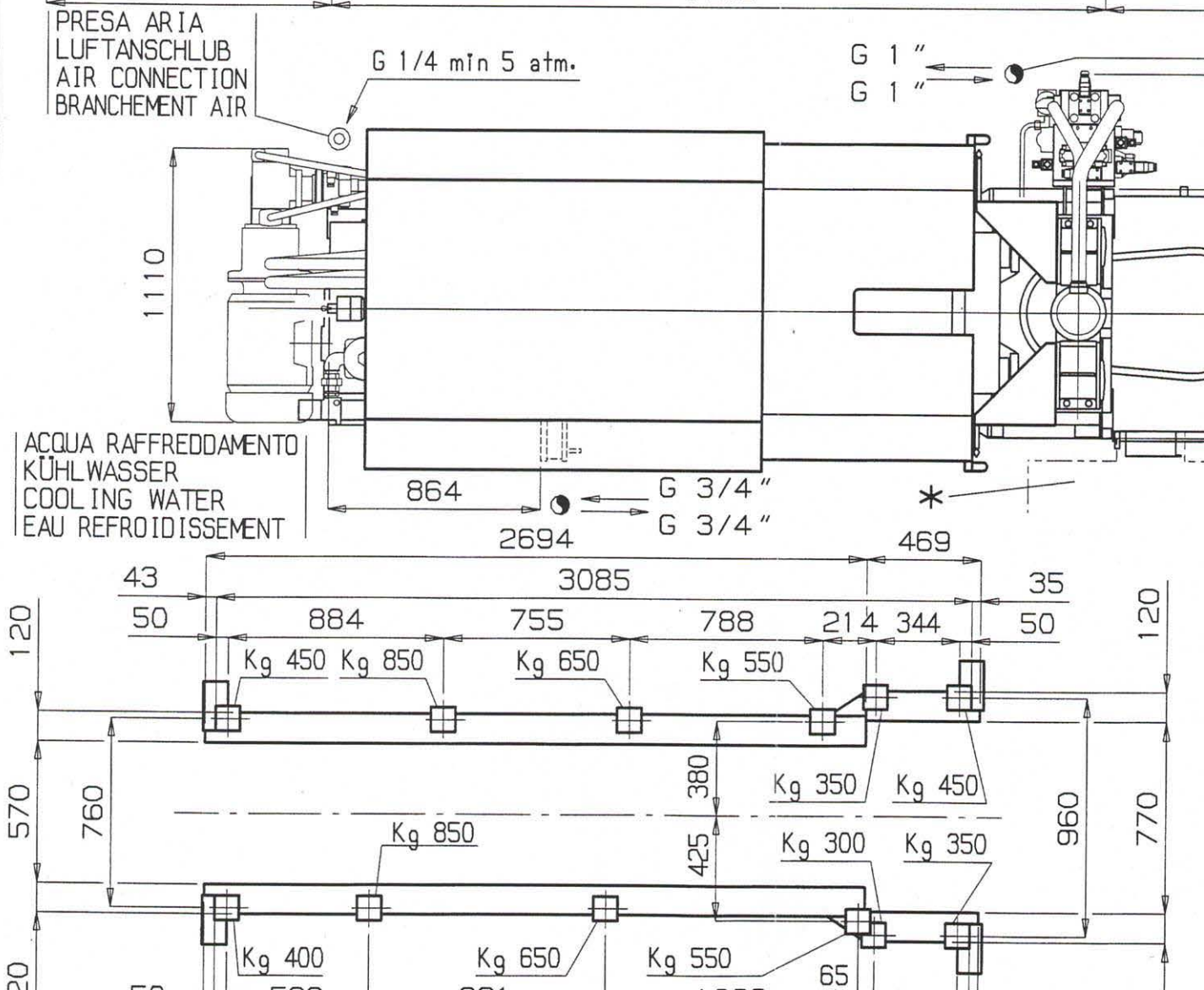


PRESA ARIA
LUFTANSCHLUB
AIR CONNECTION
BRANCHEMENT AIR

G 1/4 min 5 atm.

G 1"
G 1"

ACQUA RAFFREDDAMENTO
KÜHLWASSER
COOLING WATER
EAU REFROIDISSEMENT

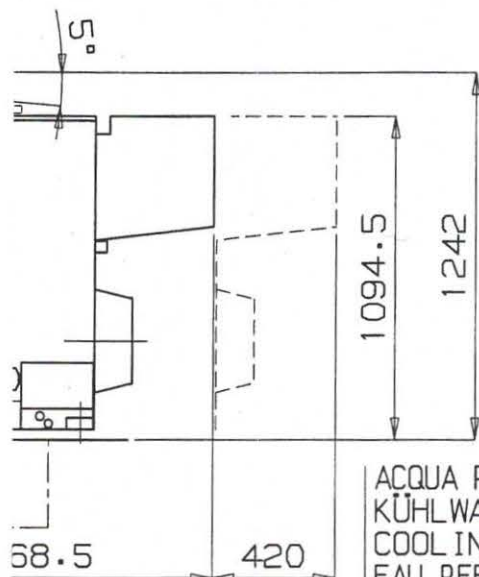


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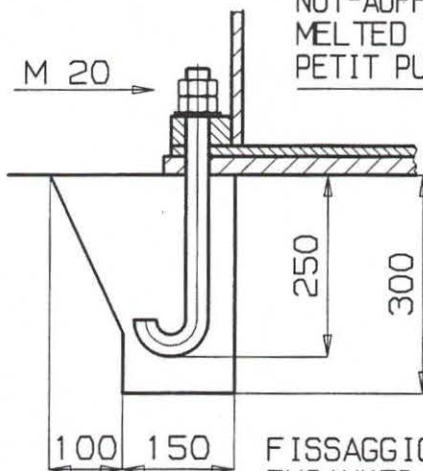
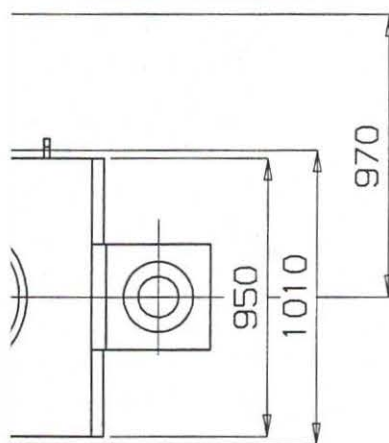
G 3/4"
G 3/4"

POTENZA MAX. INSTALLATA
MAX. BETRIEBSLEISTUNG
MAX. INSTALLED POWER
PUISSANCE MAX. INSTALLEE

KW 20

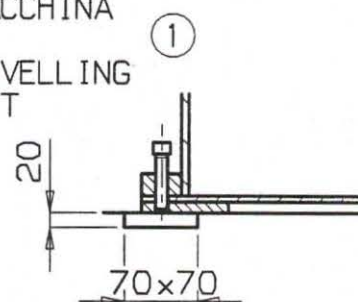


ACQUA RAFFREDDAMENTO
KÜHLWASSER
COOLING WATER
EAU REFROIDISSEMENT



POZZETTO DI EMERGENZA PER METALLO FUSO
NOT-AUFFANGGRUBE FÜR FLÜSSIGES METALL
MELTED METAL EMERGENCY FLOOR PIT
PETIT PUITS D'URGENCE POUR METAL FONDU

LIVELLO MACCHINA
JUSTIERUNG
MACHINE LEVELLING
NIVELLEMENT



FISSAGGIO MACCHINA
ZUGANKER
MACHINE FIXING
BOULON D'ANCRAGE

PIANO DI APPOGGIO-CARICO PER Kg/cm²
JFLAGEFLÄCHE-LAST / Kg/cm²
BEARING SURFACE-LOAD PER Kg/cm²
PLAN D'APPUI-CHARGE AU Kg/cm²

0.8 ~

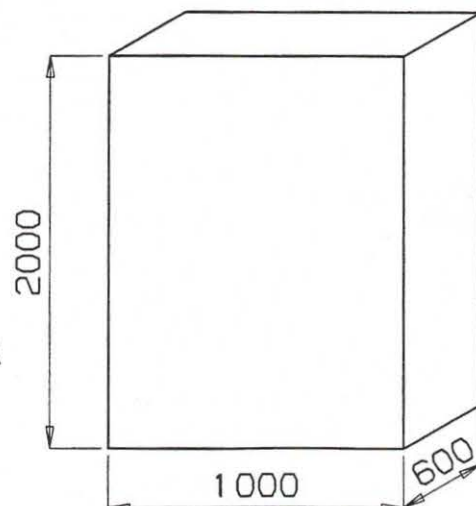
CAVITÀ ELETTRICA LUNG. mm
ELEKTRISCHES KABEL LANGE mm
ELECTRIC CABLE LENGTH mm
CABLE ELECTRIQUE LONG. mm

4000

QUADRO ELETTRICO
ELEKTRISCHER SCHALTSCHRANK
ELECTRIC CABINET
ARMOIRE ELECTRIQUE

PESO MACCHINA Kg 5800

PESO STAMPO MAX Kg 600



Data: 25/01/2002

Disegnato: B.A.

Scala:

PIANO FONDAZIONE
FUNDAMENTPLAN
FOUNDATION PLAN
PLAN DE FONDATIONS



ITALPRESSE
BRESCIA-ITALY

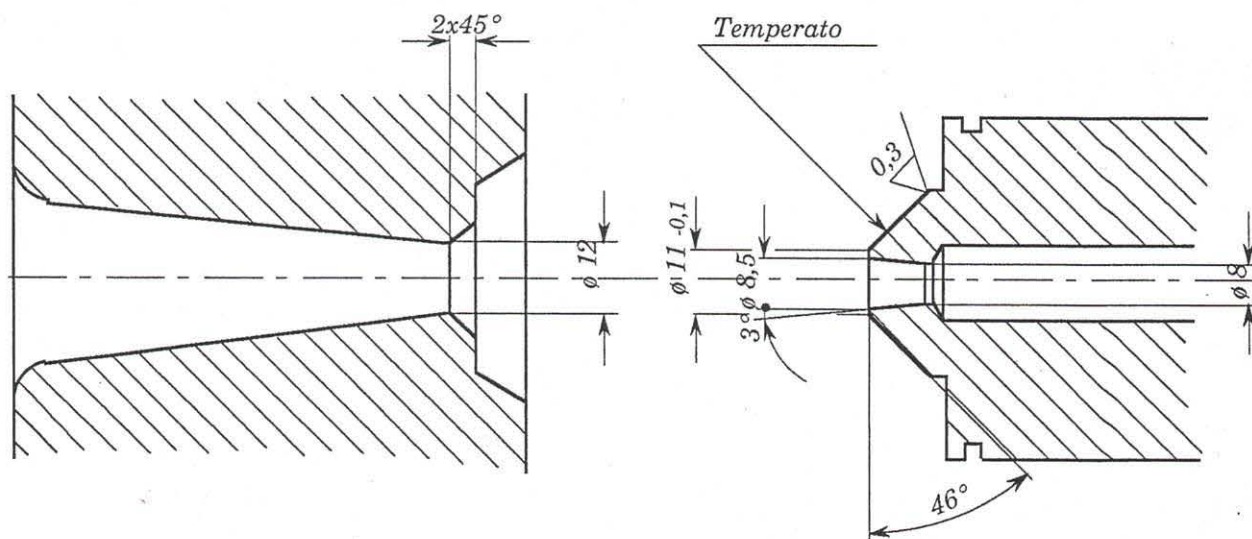
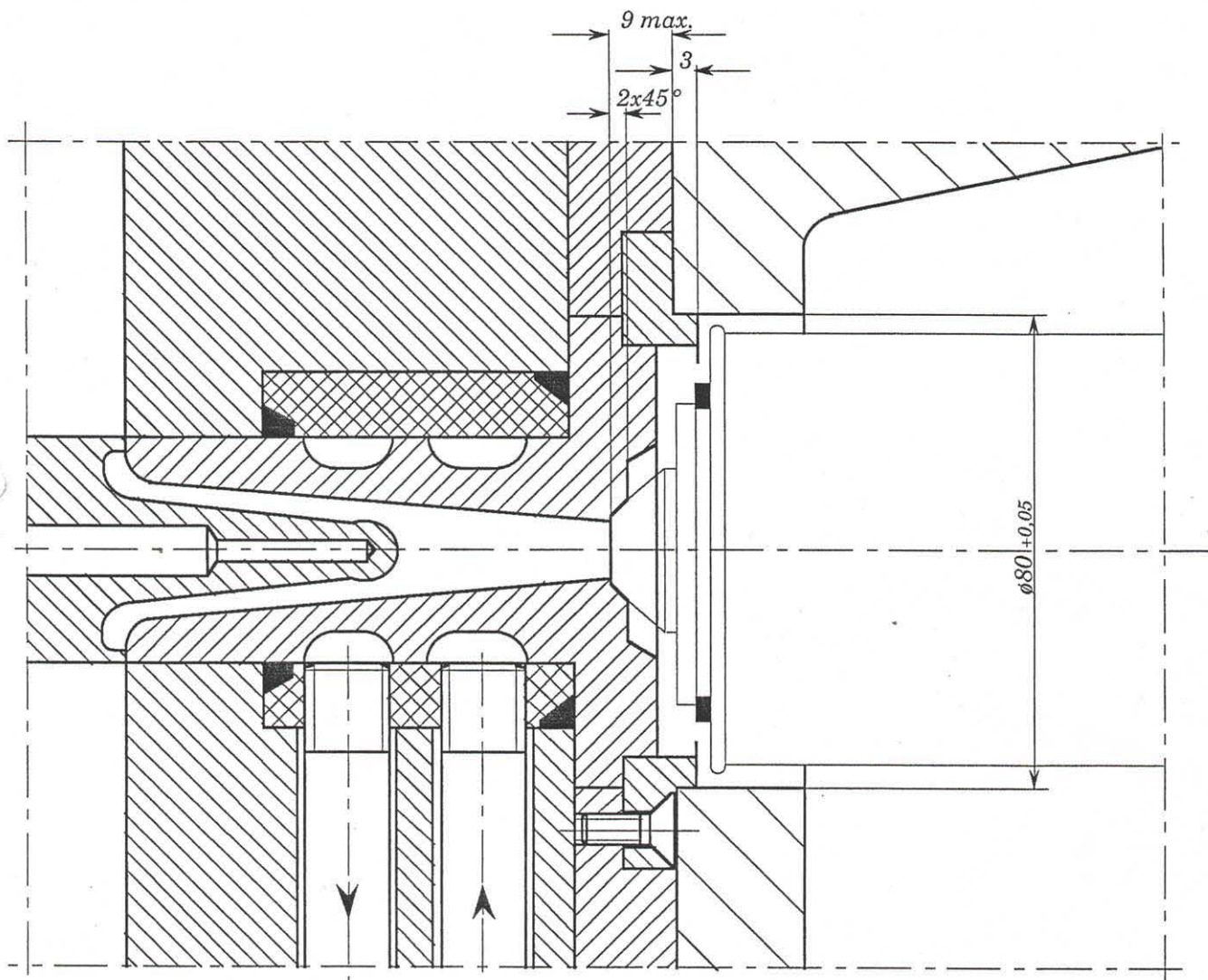


ITALPRESSE

ATTACCO COLATA TIPO 3

N° 016203340

IPZ 60T+130T



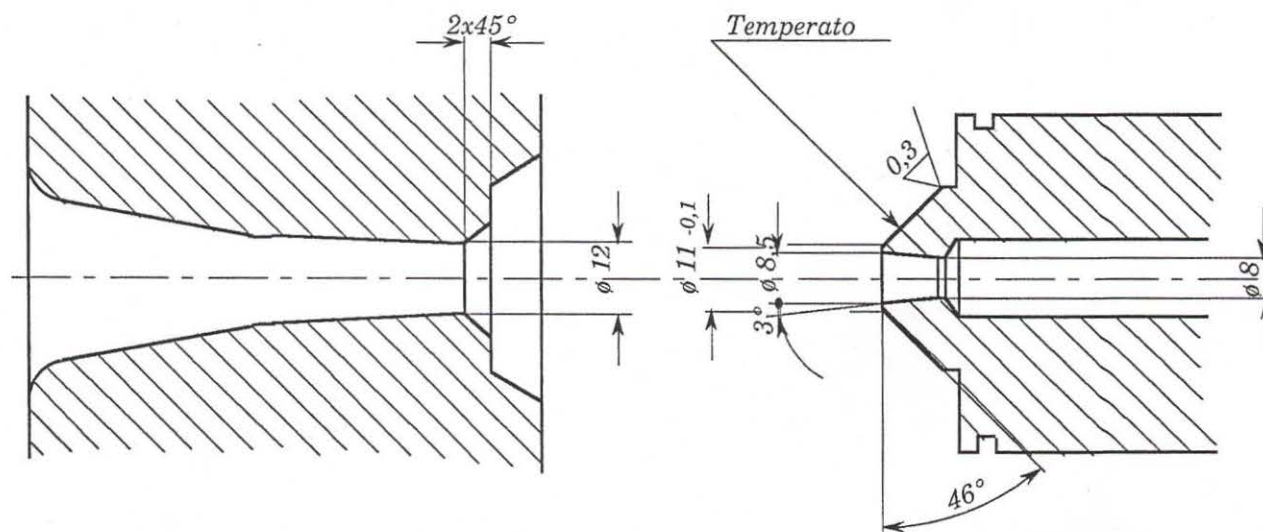
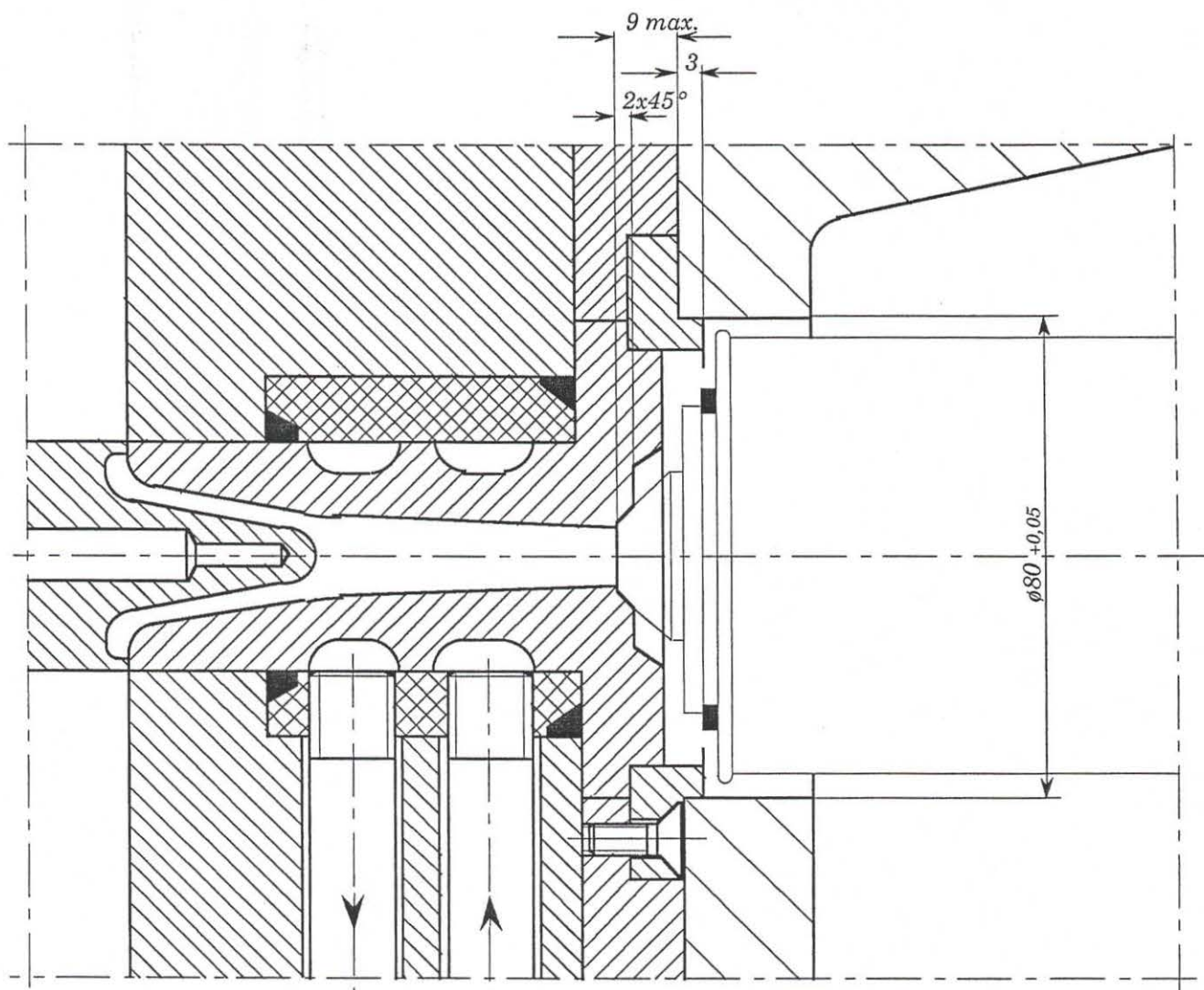


ITALPRESSE

ATTACCO COLATA TIPO 4

N° 016203350

IPZ 60T+130T





ITALPRESSE

RIPRISTINO VISCOSITÀ FLUIDO IDRAULICO
HYDRAULIC FLUID VISCOSITY DEGREE
DEGRÉE VISCOSITÉ FLÜIDE HYDRAULIQUE
WIEDERHERST. HYDR. FLÜSSIGKEITSVISKOSITÄT
GRADUACIÓN VISCOSIDAD FLUIDO HIDRÁULICO
ЕМКОСТЬ РЕЗЕРВУАРА И ДОБАВКА ВОДЫ

N° 016276760

1

Viscosità Engler Engler viscosity Viscosité Engler Engler Viskosität Viscosidad Engler Вязкость Енглера			IPZ 30T	IPZ/V/Z 60T/90T	IPZ 130T	IP/V/Z 200	IP/V/Z 300	IP/V/Z 400	IP/V/Z 550	IP/V/Z 750		
cST a 38°C			Quantità acqua da aggiungere in litri Litres of water to be added Litres d'eau a adjoindre Wassermenge nach zu füllen (in Litern) Cantidad de agua a añadir (litros) К-ВО добавляемой воды/в литрах/									
E a 38°C												
SSU a 38°C												
47	6,3	220	2	3	5	6,2	9,2	11,3	13,5	13,7		
49,5	6,6	230	5,25	7,85	13,85	16,1	25,4	28,8	34,2	35,7		
52	6,8	240	8	12	19	24,8	37,4	45,4	52,6	55		
54	7,1	250	10,25	15,35	25,35	31	46,7	56,7	65,7	68,7		

Viscosità Engler Engler viscosity Viscosité Engler Engler Viskosität Viscosidad Engler Вязкость Енглера			IP 900	IP 1100	IP 1350	IP 1650	IP 1850	IP 2150	IP 2500	IP 3000	IP 3500	IP 4000
cST a 38°C			Quantità acqua da aggiungere in litri Litres of water to be added Litres d'eau a adjoindre Wassermenge nach zu füllen (in Litern) Cantidad de agua a añadir (litros) К-ВО добавляемой воды/в литрах/									
E a 38°C												
SSU a 38°C												
47	6,3	220	20	22	24	31	37	45	45	47	52	60
49,5	6,6	230	52	57,2	59,5	80	98	117	117	120	135	150
52	6,8	240	79	88	91,6	120	150	180	180	185	207,6	220
54	7,1	250	99	110	114,5	117,5	221	225	225	230	259,6	280



ITALPRESSE

SETTING UP THE MACHINE FOR OPERATION

N° 016510032

1

FILLING WITH HYDRAULIC FLUID

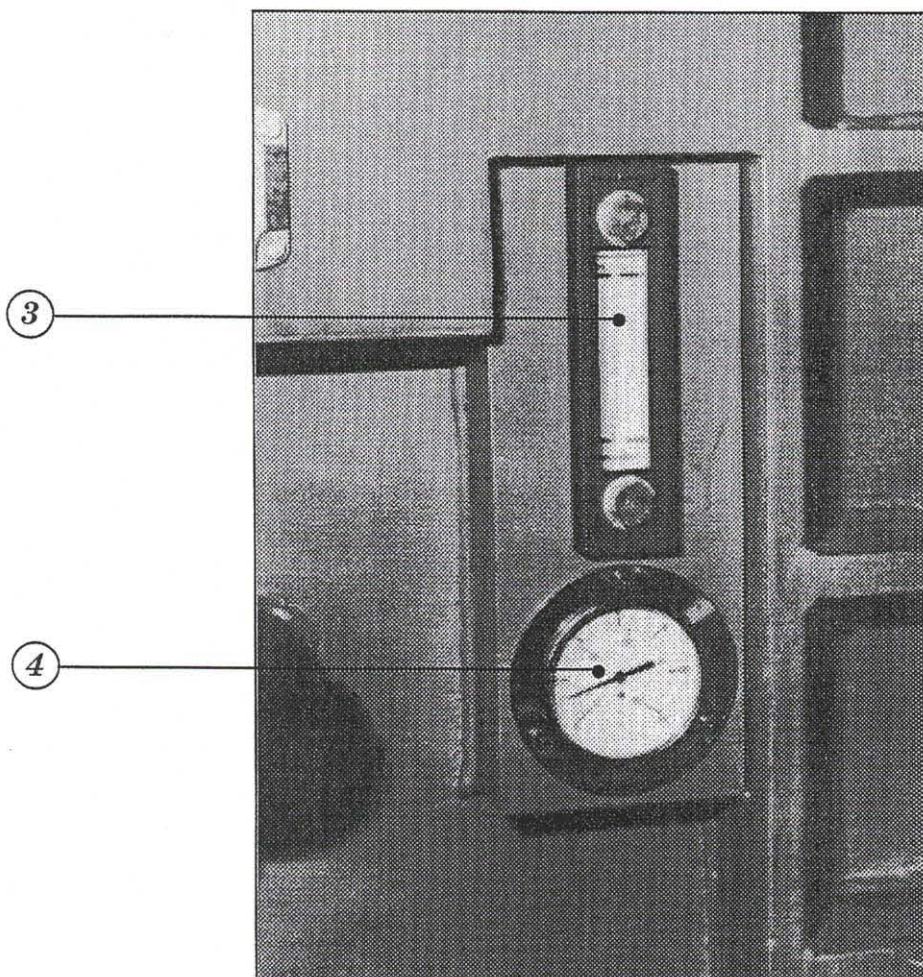
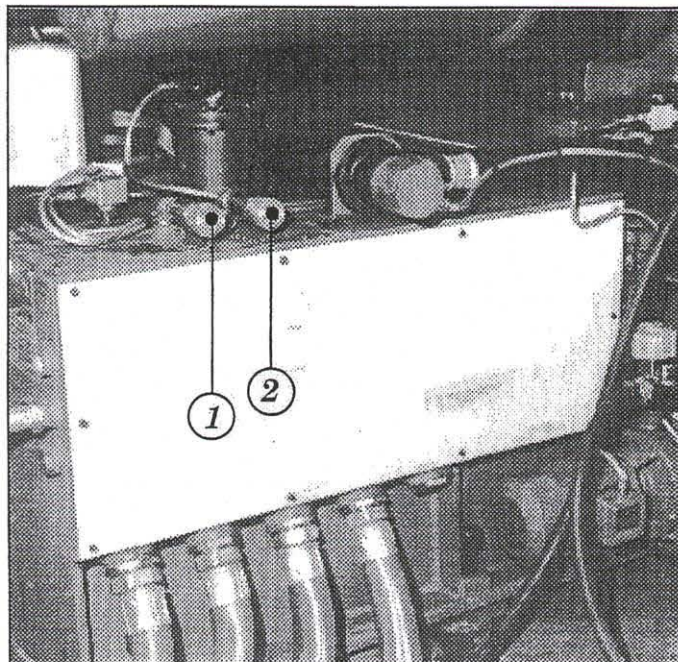
Hydraulic fluid is added to the tank through inlet "1", located in the upper part of the machine. This operation has to be carried out by the pump fitted with a filter of 10 absolute μ (micron).

The MINIMUM and MAXIMUM fluid levels can be checked by looking at the indicator located in position "3".

The hydraulic fluid characteristics should comply with the data of the table no. 016261081. Thermometer "4" shows the temperature of the hydraulic fluid at any moment. To discharge the fluid, simply remove the filter from inlet "1" and empty by means of a pump. Should the machine be connected to a filtering device to clean the hydraulic fluid, please use inlets "1" and "2".

The basic characteristics required for the filtering device are as follows :

- Flow : lt. 40 / 1'
- Filtering rate 10 absolute μ (micron)





ITALPRESSE

FLUID OF OIL-HYDRAULIC CIRCUIT**N° 016261081**

1

For the oil-hydraulic control of ITALPRESSE high-pressure die casting machines we advise the use of fire-resistant fluids produced by competent firms:

HOUGHTON**HOUGHTO SAFE 620**

AGIP**ARNICA104/FR**

*N.B.: We advise to carry out periodical drawings and accurate inspections in accordance with fluid furnisher.
Different fluid can be used with our consent only.*

The Technical Service of HOUGHTON Products Company assures, free of charge, the examination of HOUGHTO SAFE 620 in use.

These examinations should be generally carried out once or twice a year, except for particular cases.

It is very important that samples are correctly picked up in order that the sample examined is a really representative one.

When possible the sample to be inspected must be picked up under the tank level while machine is working.

This is the best procedure, but in case it is not practicable the sample can be picked up when it is possible.

We must remember that dirt usually is to be found in particular points (on the bottom of the tank and on the surface of the fluid) and for this reason a badly drawn sample can appear good even if it is not.

We must also consider that the right temperature for use of HOUGHTO SAFE 620 is within 20° and 45° C degrees; any way it must never be used at a temperature over 55° C.

In addition we suggest to inspect constantly the efficiency of heat exchangers of the machine and clean periodically the filters.

- Work temperature must never be over than 55°degrees Celsius.*
- In case of particularly low temperature we advise to pre-heat the fluid by means of the heat exchangers system before you start the pumps.*
- Check that fluid level is over minimum. In case level is lower the tank must be topped up with new fluid.*
- Periodically control viscosity, pH-value and impurities.
The fluid drawing must be carried out from the prepared points of the machine hydraulic circuit. (see photo)*

The firm HOUGHTON PRODUCTS will examine the samples of HOUGHTO SAFE 620 that are sent them, free of charge.



ITALPRESSE

FLUID OF OIL-HYDRAULIC CIRCUIT

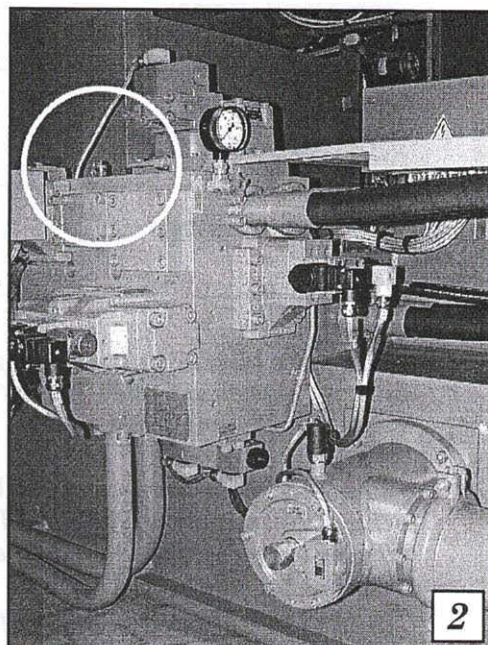
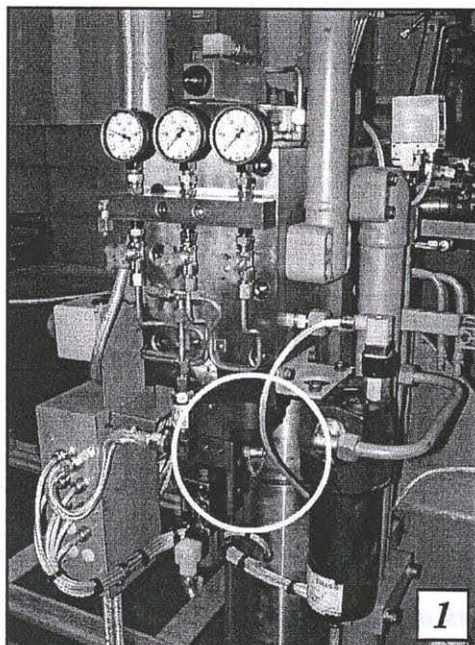
N° 016261081

2

IPZ/MG 60 ÷ 130

1 - injection

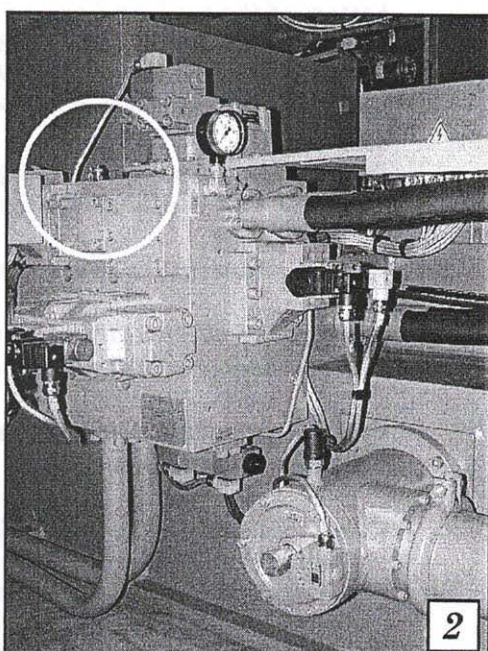
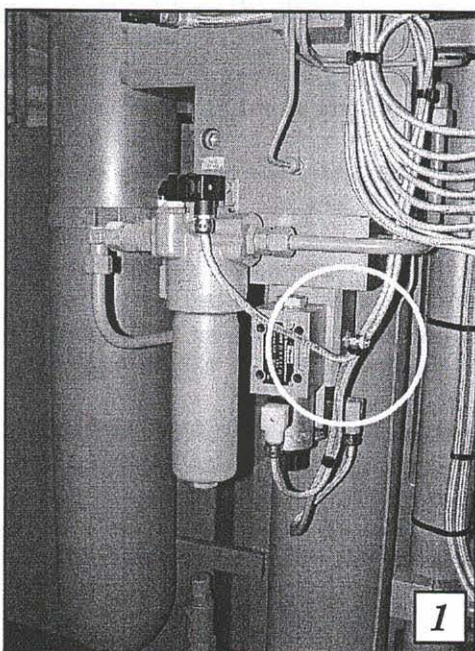
2 - kombiblock



IPZ/MG 200 ÷ 750

1 - injection

2 - kombiblock





ITALPRESSE

FLUID OF OIL-HYDRAULIC CIRCUIT

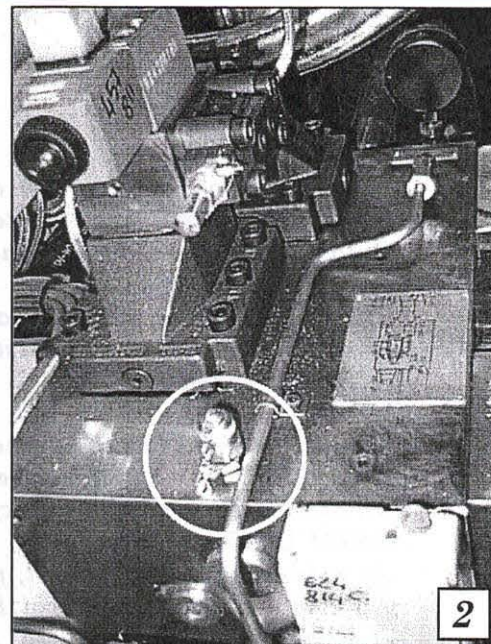
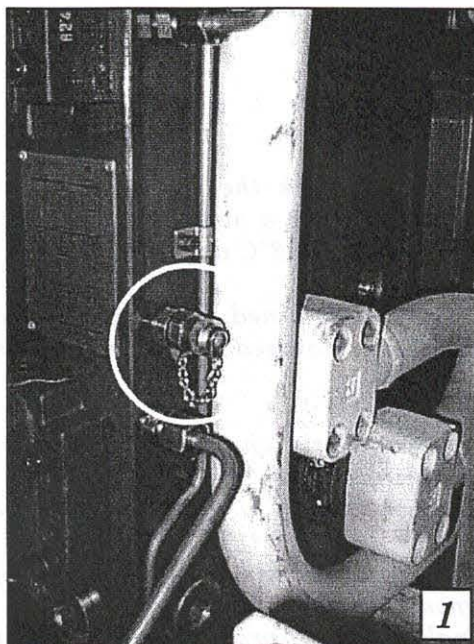
N° 016261081

3

IP/200 ÷ 750

1 - injection

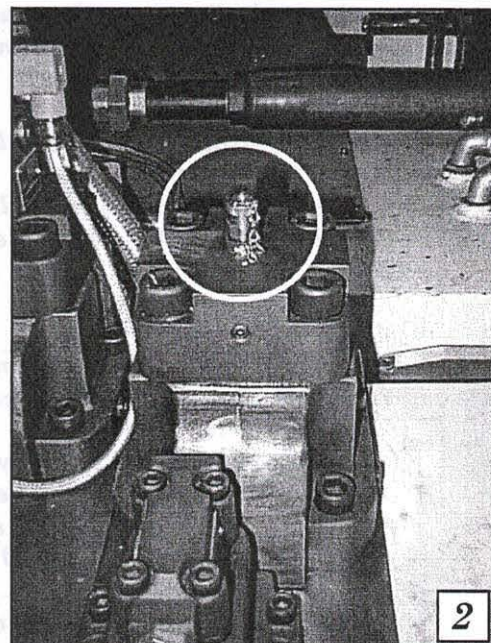
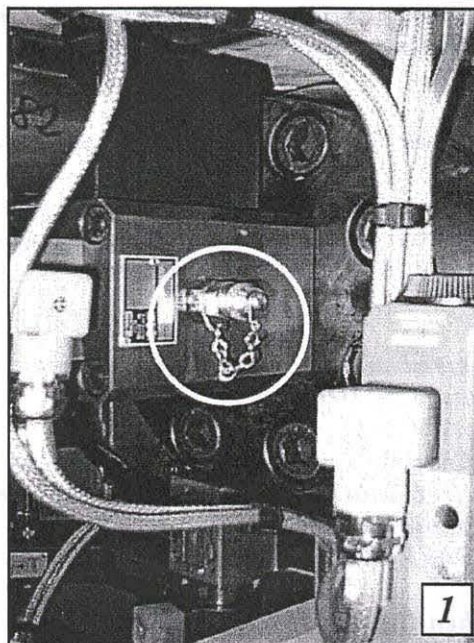
2 - kombiblock



IP/1100 ÷ 1650

1 - injection

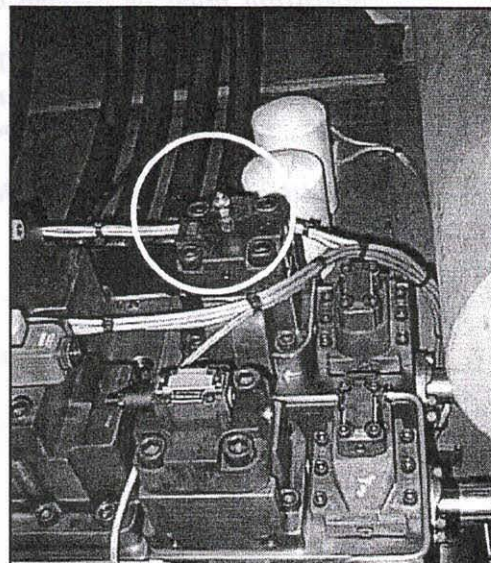
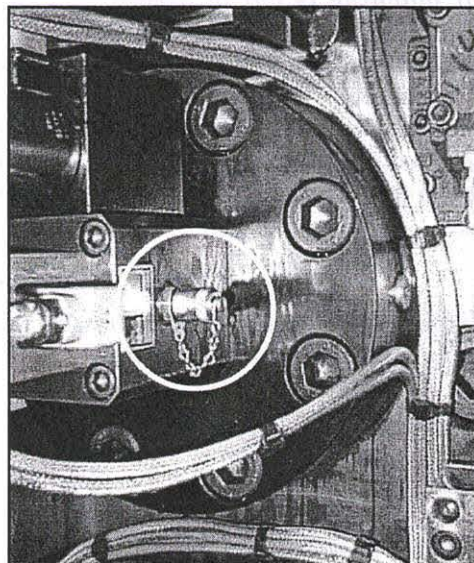
2 - kombiblock



IP/2150 ÷ 3700

1 - injection

2 - kombiblock



**a) Viscosity check**

The inspection of viscosity allows to check the evaporation rate of HOUGHTO SAFE 620; in fact you have to consider that a normal viscosity value of hydraulic fluid can vary between 5,2 and 6°Engler at 38°C degrees (viscosity at the beginning 5, 6° degrees E) .

The adjustment of viscosity value can be obtained, from a certain valve on, by means of a simple addition of distilled or deionized water in the quantity stated in following scheme:

This adjustment has to be made particularly when fluid viscosity reaches or is more than 6,3°Engler at 38° degrees centigrade.

An examination of viscosity can be obtained following the procedure ASTM D88 or ASTM D445 or D446.

As it is easy to carry out, we advise the kinematic control of viscosity with Cannon Fenske or Ostwald Fenske viscosimeter.

If viscosity is less than 5,18° Engler at 38° C probably water has entered the system and you shall remove the cause of the infiltration and ask our technical service to inform whether the fluid can be restored or not.

b) Check of pH-value

The determination of this value can be obtained with the pH-value of HOUGHTO SAFE 620 must lay between 8-10.

Values out of the indicated limits mean a contamination by foreign agent.

The HOUGHTON After-Sales Service will inform if the pH-value can be corrected by the use of an additive or if the fluid must be replaced.

c) Check of impurities

Impurities and residues of mineral oil can have different origins.

It is therefore necessary to examine regularly:

- that oil filters are clean
- that there is no oil or dirty floating in the tank of machine
- an examination of impurities (residual oil or sediments) can be easily carried out with a centrifugation of a sample of used fluid.
- top up with new HOUGHTO SAFE 620 fluid only and avoid to mix different kinds of glycol water
- the fluid must be skimmed when the oily layer is more than the value of 1 %; this operation must be carried out machine is out of action.

The HOUGHTO SAFE 620 fluid can endure more than 10.000 hours provided that the normal use conditions are observed.

Therefore we advise that temperature, viscosity, pH-value and oil layer must often be checked in order to obtain a long and satisfying life time of fluid.

In addition we advise to encharge a qualified man with the maintenance of machine and the control of fluid.

d) Disposal

The exhaust fluid shall be disposed of according to standard practice and in compliance with the national environmental regulations.

AUTOMATIC LUBRICATION OF THE MACHINE PARTS

The machine is provided with automatic lubrication for all its movements. The lubrication system consists of various proportioning devices and of the lubrication pump, which can handle oil up to IP 750 and grease from IP 1100. To check and fill the lubricant, proceed as follows:

fill the tank of the lubrication pump motor unit with high quality fluid (see lubricant tables) without removing the filter mounted on inlet "A"

Push button "MACHINE LUBRICATION" located on the machine button panel and check that the pump motor starter rotates in the right direction.

Check the efficiency of the lubricant delivery by reading pressure gauge "C" mounted on the pump itself.

Check that, after a short period of time, the pressure gauge mounted at the circuit end stops the lubrication pump motor, when the pressure has reached 40-45 bars.

Recheck the above a couple of times, at intervals of a few minutes, beginning by pushing button "MACHINE LUBRICATION".

Set the "LUBRICATION PRESELECTRO" so that it operates the automatic lubrication cycle with a maximum interval of 100 cycles.

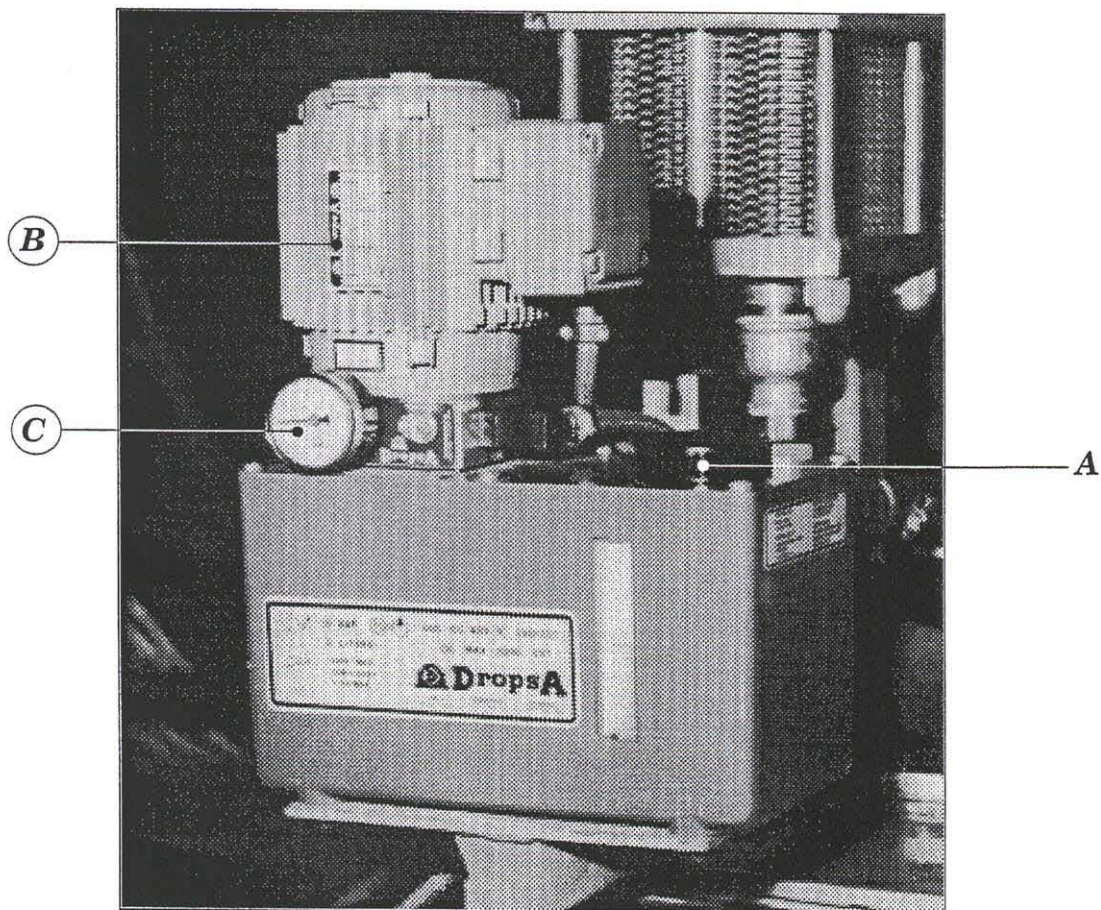


ITALPRESSE

N° 016561731

IP300+750

1





ITALPRESSE

LUBRICANTS**N° 016261020**

4

TYPE OF LUBRICANT	PARTS TO BE LUBRICATED AND WAY TO LUBRICATE THEM
TOGGLE JOINTS AND TIE-BARS <i>B</i> _____ When lubricated with oil centralized system with automatic pump <i>D</i> _____ When lubricated with grease centralized system with automatic pump <i>D</i> _____ When hand lubricated with grease gun	
MOVING PLATEN SHOES <i>B</i> _____ When lubricated with drop-oiler <i>B</i> _____ When lubricated with oil centralized system with automatic pump <i>D</i> _____ When lubricated with grease centralized system with automatic pump	
DIE LOCKING UNIT SHIFTING <i>B</i> _____ With hand pump <i>B</i> _____ With automatic oil system <i>D</i> _____ With automatic grease system	
<i>B</i> _____ DIE LOCKING UNIT GEARED MOTOR	
INJECTION UNIT <i>B</i> _____ When lubricated with oil centralized system with automatic pump <i>D</i> _____ When hand lubricated with grease gun <i>D</i> _____ When lubricated with grease centralised system	
<i>E</i> _____ SAFETY GATE Pneumatic cylinder lubricating unit	



ITALPRESSE

LUBRIFICANTS

N° 016261031

1

TYPE OF LUBRICANT

	<i>B</i>	<i>D</i>	<i>E</i>
	<i>VISCOSITY</i> <i>E 50° C</i> <i>15,5 ÷ 17,5</i>	<i>VOLUMETRIC</i> <i>MASS</i> <i>NLGI - 1</i>	<i>VISCOSITY</i> <i>E 50° C</i> <i>- 3,7 - 4,2 -</i>
<i>AGIP</i>	<i>EXIDIA 220</i>	<i>GR MU EP 1</i>	<i>OSO</i>
<i>IP</i>	<i>BANTIA OIL G 220</i>	<i>ATHESIA EP 1</i>	<i>HYDRUS OIL 46</i>
<i>ESSO</i>	<i>FEBIS K 220</i>	<i>BEACON EP 1</i>	<i>NUTO H 46</i>
<i>CASTROL</i>	<i>MAGNA CF 220</i>	<i>SPHEROL EPL 1</i>	<i>HYSPIN AWS 46</i>
<i>MOBIL</i>	<i>VACTRA OIL N.4</i>	<i>MOBILUX EP 1</i>	<i>MOBIL DTE 25</i>
<i>FINA</i> <i>TOTAL</i> <i>ELF</i>	<i>DROSERA MS 220</i>	<i>MULTIS EP 1</i>	<i>AZOLLA ZS 46</i>



ITALPRESSE

TYPE OF LUBRICANT "B"

DROSER - MS

N° 016261371

1

DESCRIPTION

DROSER - MS oils have been specifically developed for the machine tool industry, for the lubrication of sliding surfaces in precision machine operations.

These oils are manufactured from selected lubricating oil stocks, incor-

porating special types of additives to obtain EP characteristics, oiliness and adhesive qualities. DROSER - MS oils contain corrosion inhibitors and they are available in two grade: 68 and 220.

TYPICAL CHARACTERISTICS

GRADE DESIGNATION		68	220
ASPECT			
COLOR ASTM		L2	L5
DENSITY AT 20/ 4°C		0,876	0,892
VISCOSITY AT 40°C	cst	67,5	228
VISCOSITY AT 100°C	cst	9,2	19,2
VISCOSITY INDEX		104	100
FLOWING POINT °C		-27	-12
INFLAMMABLE POINT V.A.	°C	218	242
WEAR TESTS :			
- 4 sphere: melding charge	Kg.	240	240
- FZG:	no. étage	12	12
THERMIC STABILITY			
- acidity increase	(mgKHO/g)	0,03	0,03
- settling		zero	zero

RECOMMENDED USES

DROSER - MS oils are recommended for the lubrication of slides, ways and guides on machine tools in precision machine operations. The oils are used wherever a lubricant with high degree of oiliness, EP and adhesive qualities is required.

Grade 68 is intended for light loads, while grade 220 is used in heavy load operations.

DROSER - MS oils meet the specifications of CINCINNATI MILACRON as indicate in the instruction manuals of the mentioned Company.

PERFORMANCE QUALITIES

CUSTOMER BENEFITS

1. Rust protection

Assures protection against corrosion on rusting of machine precision parts

2. EP Anti-wear characteristics

Assures high film strength and excellent lubrication on plain surfaces under heavy sliding loads.

3. Oiliness properties

Ensures smooth operation, reduces damage to cutting tools, and provides smoother surface finish on work-piece with lower operating costs.

4. Adhesive properties

Assures excellent adhesion to slides and ways, reduces dripping and ways, reduces dripping and leakage, maintaining even oil film on the lubricated parts.



ITALPRESSE

TYPE OF LUBRICANT "D"

N° 016261380

1

MULTIS EP 1



Grease



TOTAL

Multi purpose extreme pressure lithium/calcium grease.

APPLICATIONS

Multi purpose EP grease
General Lubrication**Recommendation**

- **MULTIS EP 1** is a true multi purpose grease, formulated for lubrication of loaded slide-ball- and roller-bearings, wheelbearings, universal joints, chassis, and various shock loaded or vibrating applications in transport, agriculture and off road equipment, operating in wet, dusty and/or dry conditions.
- Suitable as general purpose grease for industrial applications requiring a NLGI 1 grade Extreme Pressure grease.
- Always avoid contamination of the grease by dust and/or dirt when applying. Preferably use a pneumatic pump system or cartridges.

SPECIFICATIONS

- ISO 6743-9: L-XBCEB 1
- DIN 51 502: KP1K -25

ADVANTAGES

Durable film
Miscible
Mechanical stability
Thermal stability
No harmful substances

- Because of its true Multi Purpose character **MULTIS EP 1** may replace a wide range of greases, allowing stock rationalization and simplification of maintenance.
- Forms a durable lubrication film, resulting in reduction of maintenance and down-time costs.
- Miscible with most other conventional soap greases.
- Excellent mechanical stability avoiding ejection or loss of consistency during operation.
- Excellent adhesion to metal.
- Good thermal stability, leading to high resistance to temperature variations.
- **MULTIS EP 1** does not contain lead, or other heavy metals considered harmful to human health and the environment.

TYPICAL CHARACTERISTICS	METHODS	UNITS	MULTIS EP 1
Soap/thickener		-	Lithium/ Calcium
NLGI grade	ASTM D 217/DIN 51 818	-	1
Color	Visual	-	Pale brown
Appearance	Visual	-	Smooth
Operating temperature range		°C	- 25 to 120
Penetration at 25°C	ASTM D 217/DIN51 818	0.1 mm	310 -340
Four ball weld load	DIN 51 350-4	daN	260 - 280
Anti-rust performance SKF- EMCOR	DIN 51 802/IP220/NFT 60-135/ISO 11007	rating	0 - 0
Dropping point	IP 396/NFT 60 102 C	°C	> 190
Kinematic viscosity of the base oil at 40°C	ASTM D 445/DIN 51 562-1/ISO 3104/IP71	mm²/s (cSt)	150

Above characteristics are mean values given as an information.

