

SECTIUNEA II

CAIET DE SARCINI

Lotul 1

**CONPET S.A.**

str. Anul 1848 nr. 1-3, Ploiești, 100559, Prahova, România
Tel: +40-244-401360; fax: + 40 – 244 – 516451
e-mail: conpet@conpet.ro; web: www.conpet.ro
CUI: 1350020; Cod CAEN 4950; Înregistrată la Registrul
Comerțului Prahova sub numărul J29/6/22.01.1991
Capital social subscris și vărsat 28 569 842,40 lei



Lotul 1
CAIET DE SARCINI

**ACHIZITIE POMPE PENTRU DECANTOARE IN LOCATIILE
STATIA CARTOJANI, RAMPA CIRESU, RAMPA PECICA**

1. BENEFICIAR

CONPET S.A. - cu sediul central in Ploiești, Str. Anul 1848 nr. 1-3, cod 100559, jud. Prahova, înregistrat la Registrul Comerțului sub nr. J26/6/22.01.91, cod fiscal 1350020, cont virament IBAN nr.RO88RNCB3900000001700001 deschis la B.C.R. Ploiești, reprezentată prin Director General ing. LIVIU ILASI și Director Economic ec. SANDA TOADER.

2. INFORMATII GENERALE SI TEHNICE

La ora actuala in cele 3 puncte de lucru din Statia Cartojani, Rampa Ciresu, Rampa Pecica situatia se prezinta astfel:

1. Statia Cartojani: pe decantor este instalata o pompa ACV 250 , cu nr. inv. 236 502, avand un debit de $Q = 20 \text{ m}^3/\text{h}$. Pompa prezinta un grad ridicat de uzura, aceasta suferind multiple reparatii curente si capitale in timpul exploatarei;
2. Rampa Ciresu: decantorul din zona cladirii casa pompe nu este echipat cu pompa, la ora actuala folosindu-se pompele de incarcare in vagoane pentru vehicularea condensului descarcat din cisternele auto. Acest mod de lucru nu asigura o eficienta crescuta in functionare si nu poate fi folosit in momentele in care se realizeaza incarcarea cisternelor CF. Avand in vedere cantitatile de condensat dar si rezolvarea problemei legata de golirea acestui decantor se impune dotarea acestuia cu o pompa care va crea posibilitatea vehicularii independente a scurgerilor de titei/cantitatilor de condensat din acesta;
3. Rampa Pecica: decantorul este echipat la ora actuala cu o pompa Sadu (multietajata) amplasata chiar in interiorul decantorului (total impropriu din toate punctele de vedere), actionata de un motor electric printr-o transmisie prin curele. Atat utilizarea cat si mentenanta acestei pompe este foarte dificila.

3. CERINTE TEHNICE

Avand in vedere situatia actuala si gradul de utilizare al agregatelor de pompare utilizate in prezent, in urma studierii atente a ofertelor tehnico-economice de pe piata, consideram ca, solutii fiabile de echipare a acestor decantoare pot fi reprezentate de urmatoarele variante constructive:

- pompe centrifuge verticale;
- pompe cu roti dintate;
- pompe cu surub;
- pompe cu lobi rotativi;
- pompe cu cavitati progresive – constructie verticala;
- etc.;

Caracteristici tehnice solicitate:

- debit: minim 10 m³/h;
- presiune de refulare: minim 6 bari (60 mcol H₂O)
- temperatura de operare: -30 °C - +40°C;
- fluidul vehiculat: apa/titei/condensat – posibil cu impuritati;
- actionare: electrica; U=400V; 50hz; in constructie AntiEx;
- Puterea maxima: 11 kw;
- pompele, in functie de varianta constructiva aleasa, trebuie sa fie autoamorsante;
- adancimea (decantoarelor) de aspiratie este de 4 metri;

4. ALTE CERINTE

- pompele trebuie sa fie in constructie Ex si provenite din Uniunea Europeana (cu marcaj CE);
- pompele se vor monta pe skiduri comune pompa-motor (monobloc), montajul in locatie, va fi asigurat de catre Conpet;
- cuplaje elastice, filtrele (daca este cazul) si skidurile comune motor-pompa vor fi dimensionate in functie de particularitatile si geometria instalatiilor, utilajelor si incintelor din teren; la cerere, ofertantii pot vizita amplasamentul cu avizul CONPET S.A. Ploiesti;
- vor fi furnizate bolturi de fixare in fundatii ale skidurilor comune motor-pompa, sisteme de prindere pe skid ale pompelor si motoarelor electrice, contraflanse aspiratie-refulare (cu prezoane si piulite), garnituri, manometre pe aspiratie/refulare si orice alta furnitura recomandata de catre ofertant;
- se va cota un set de piese de schimb recomandat de catre fabricant pentru o perioada de 2 ani de operare (minim 1 bucata sistem de etansare/lagare/rulmenti pompa/motor);
- dupa perioada de garantie se vor asigura piese de schimb contracost pe o perioada de minim 10 ani;
- va fi inclusa si cotata asistenta tehnica la punerea in functiune, precum si instruirea personalului de operare apartinand CONPET;
- va fi furnizat Manual de Operare in limba romana, care sa includa si instructiuni de montaj, detalii fundatie etc.;
- se va livra documentatia tehnica a pompelor, care va include toate certificările si agrementările legale (Ex, produs inflamabil: titei, declaratie de conformitate etc.);
- se va specifica termenul de livrare al pompelor;
- se vor specifica testele de fabrica la care sunt supuse pompele;

5. PRECIZĂRI

Perioada de garanție a pompelor si accesoriilor furnizate: minim 2 ani;
Termen de livrare: max. 60 zile;

Inginer Sef Mecano Energetic

Dr. Ing. Ion Beldiman

Ing. Nargis Stoica
Serv. Mecanic

Lotul 2

**CONPET S.A.**

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lotul 2

CAIET DE SARCINI**Achizitie pompa densimetru de rezerva
pentru skidurile de masura pentru locatiile CONPET****BENEFICIAR**

S.C. CONPET S.A. - cu sediul central in Ploiești, Str. Anul 1848 nr. 1-3, cod 100559, jud. Prahova, înregistrat la Registrul Comerțului sub nr. J26/6/22.01.91, cod fiscal 1350020, cont virament IBAN nr.RO88RNCB3900000001700001 deschis la B.C.R. Ploiești, reprezentată prin Director General ing. Liviu ILASI și Director Economic ec. Sanda TOADER.

1. GENERALITATI: DATE TEHNICE.

Prezentul caiet de sarcini prezinta specificatiile tehnice ale pompei cu roti dintate ce intra in alcatuirea skidurilor de masura din dotarea Conpet:

Tipul pompei – refinex 36/36 (SAP 645093)

Cod Degajare – A2 / W1 / R1

Sensul de rotatie – stanga

Directia de curgere – de la dreapta la stanga

Carcasa – G 00 (DIN 0.6020)

Roti Dintate – Z 60

Rulmenti – echipata cu lagare: L 01

Etansare – D6.S (single mechanical seal)

Extensie flansa – 200 mm

Cuplaj D-Flex – K28

PRECIZĂRI

Se vor prezenta instructiuni de utilizare în limba română (coduri ale componentelor).

Certificat calitate emis de catre producator si declaratie de conformitate.

2. GARANTIE

Termen de garantie: 2 ani

Ing Sef Mecano Energetic

Dr ing Ion Beljiman

Sef Serviciu Mecanic,

ing. Narcis Stoica

Intocmit,
Ing Adrian Bontas

Fig.3 Ausführung mit Fuss
Execution with foot

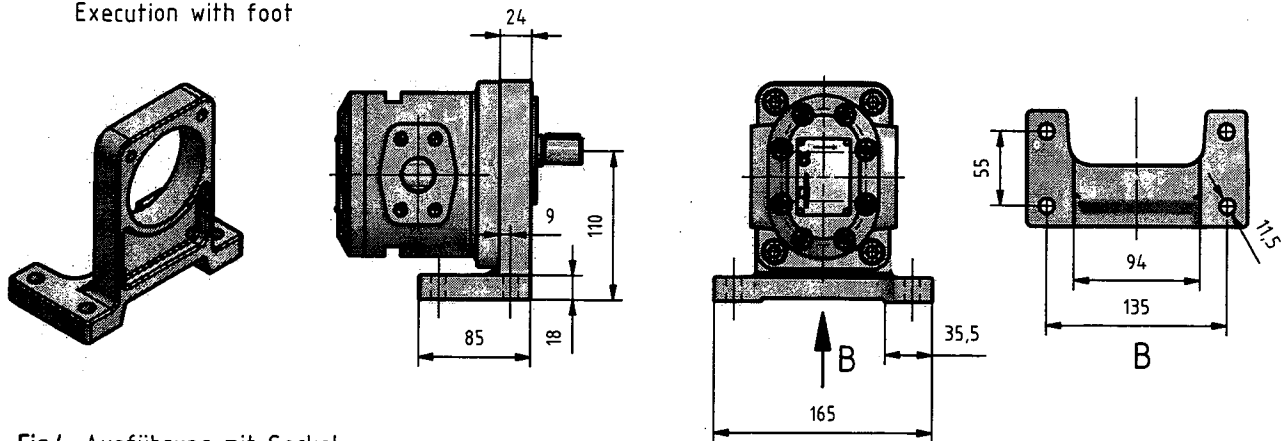
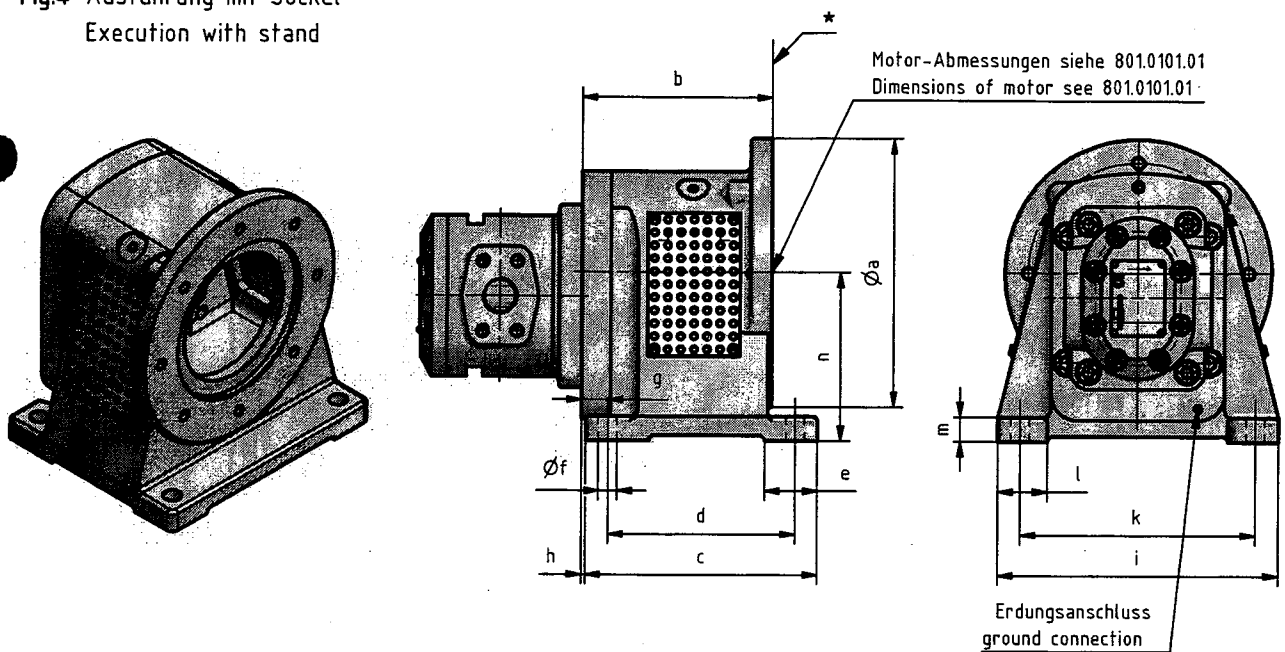


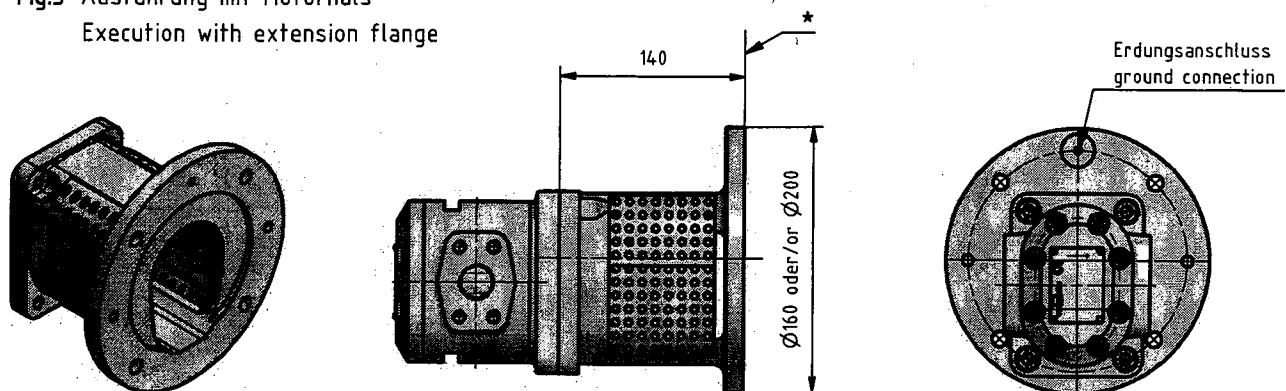
Fig.4 Ausführung mit Sockel
Execution with stand



a	b	c	d	e	f	g	h	i	k	l	m	n
160	144	170	140	30	11.5	16	1	175	148	27.5	16	100
200	144	176	142	40	14	20	3	210	176	37.5	18	125

Motor/Variator Flansch nur B5-Cenel
Motor/variator-flange just B5-cenel

Fig.5 Ausführung mit Motorhals
Execution with extension flange



* bei Doppelgleitringdichtung evtl. Zwischenring nötig
with double mechanical seal possibly spacer ring necessary

Fördervolumen $V = 25,6 \text{ cm}^3/\text{U}$
Capacity $25,6 \text{ cm}^3/\text{rev.}$

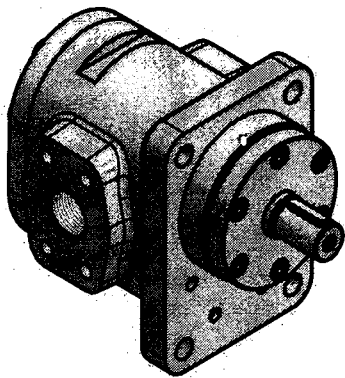


Fig.1

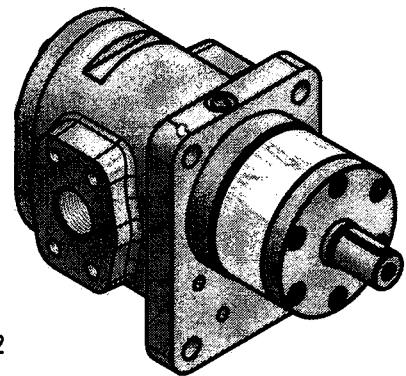


Fig.2

Fig.1 Ausführung mit Einfachdichtung
Execution with single seal

Sperranschlüsse für aussenliegende
Dichtung siehe Fig. 2.
Flush connections for external
seal see Fig. 2.

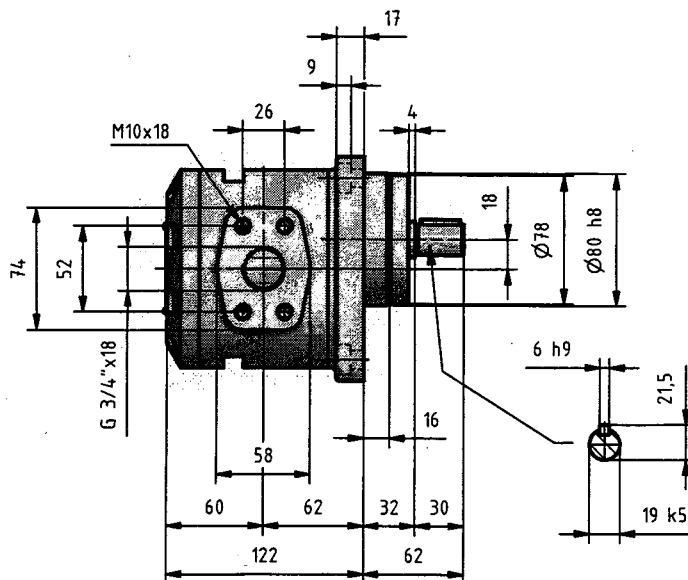
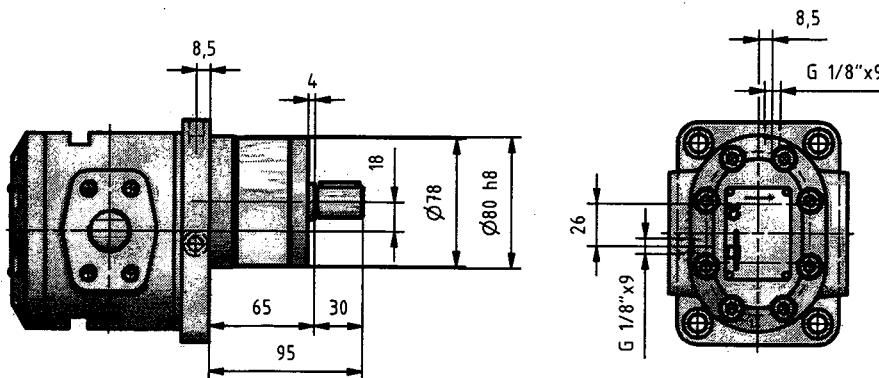


Fig.2 Ausführung mit Doppeldichtung
Execution with double mechanical seal



Förderrichtung von Motor auf Pumpe
gesehen, bei Bestellung angeben.
Direction of rotation as seen from
motor to pump advise with order.

Sperranschlüsse für Dichtung
übrige Maße siehe Fig.1.
Seal flush connections other
measures see Fig.1.

Bei gesperrter Dichtung und
Förderung von oben nach unten
Drehsinn nur links möglich.
With flushed (sealed) mechanical
seals flow from top to bottom
direction of rotation to the left only.

Operating data

01	Pumped medium		Unknown	Incl. safety factor for drive calculation
02	Abrasive / corrosive	[Yes/No]		
03	Viscosity	[mPas]		
04	Operating temperature	[°C]		
05	Flow rate	[l/min]		
06	Inlet pressure, absolute	[bar]		
07	Outlet pressure, absolute	[bar]		
08	NPSH-required	[mbar]		
09	Rev. per minute, calc.	[rpm]		
10	Drive power, calc.	[kW]		
11	Constant torque	[Nm]		

Pump

12	Pump type	<i>/ tip pompa</i>	refinex® 36/36 (SAP 645093)	
13	ATEX		Without	
14	Clearance code	<i>Cod deșeură</i>	A2 / W1 / R1	
15	Sense of rotation	<i>/ sens de rotație</i>	left	
16	Flow direction	<i>/ direcție curgere</i>	from right to left, seen from drive side	
17	Housing	<i>/ carcasa</i>	G 00 (DIN 0.6020)	
18	Heatable pump	<i>/ se poate încălzi</i>	[Yes/No] No	
19	Specials	<i>/ se furnizează</i>	Without	
20	Gears	<i>/ roți dințate</i>	Z 60	
21	Bearings	<i>/ rulmenți</i>	L 01	
22	Sealing	<i>/ etanșare</i>	D6.S (single mechanical seal)	
23	Extension flange	<i>/ extindere flansă</i>	200 mm	
24	Coupling D-Flex	<i>/ cuplare D-flex</i>	K 28	
25	Product flanges	<i>/ flansă produs</i>	[2 pcs.]	

maag pump systems

Maag gear pumps for industrial applications and processes

hydrolub®/refinex®

proven processing solutions

Construction characteristics:

Pump housing	hydrolub® refinex®	Cast iron Carbon steel
Gears		Nitrided alloy steel, 440 B stainless steel, and other special materials
Bearings		Various selections available: carbon, silicon carbide, bronze, nickel silver, hardened tool steel, and other
Shaft seals		Single or double mechanical seal, and mag. drive sealless designs
Connections		NPT, ANSI, and CETOP flanges

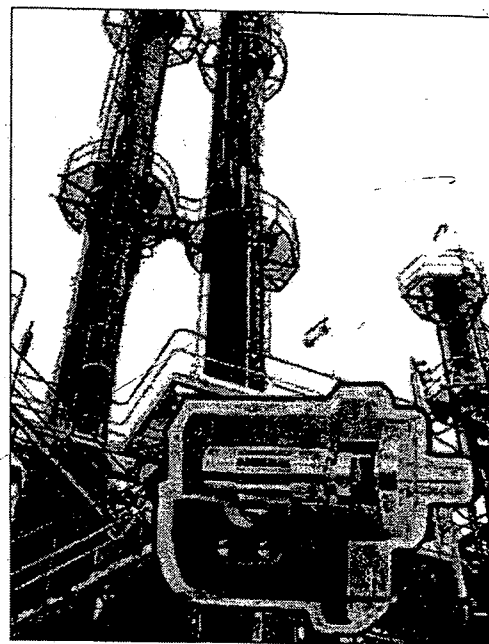
Technical Data:

Viscosity	0.3 to 4,000,000 cP
Temperature	-22 to 608°F
Suction pressure	Vacuum to 220 psig
Discharge pressure	
hydrolub®	Vacuum to 1,750 psig
refinex®	Vacuum to 5,000 psig
Capacity	1.28 to 3,200 cc/rev
	Higher capacities in special executions

Capacity Rates:

Size Model Capacity gpm at the pressure of 0 psi at the speed of:
750 rpm 1000 rpm 1500 rpm 3000 rpm

22/6	NP	0.254	0.338	0.507	1.015
22/13	NP	0.550	0.734	1.102	2.203
22/22	NP-RX	0.930	1.242	1.863	3.725
22/28	NP	1.184	1.580	2.370	4.729
28/28	NP-RX	2.021	2.695	4.042	8.085
28/36	NP	2.594	3.461	5.178	10.383
36/28	NP	3.937	5.258	7.873	15.773
36/36	NP-RX	5.073	6.764	10.145	20.338
36/45	NP	6.341	8.454	12.682	25.363
45/45	NP-RX	9.168	12.232	18.336	36.724
45/56	NP	11.440	15.244	22.853	45.707
56/56	NP-RX	18.336	24.485	36.724	
56/70	NP	22.990	30.647	45.971	
70/70	NP-RX	34.875	46.500	69.749	
70/90	NP	44.914	59.974	89.828	
90/90	NP-RX	73.448	98.018	146.896	
90/110	NP	89.828	119.683	179.392	
110/90	NP	115.984	154.557		
110/110	NP-RX	141.876	189.168		
110/140	NP	180.450	240.687		
140/110	NP	208.719	278.468		
140/140	NP-RX	265.786	354.557		
140/180	NP-RX	341.876	455.746		



For Further Information:

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LCI Fluid Systems

Wil-Man Polymer Filtration

TEXTRON

back

questionnaire

maag pump systems

Maag gear pumps for
industrial applications and
processes

hydrolub®/refinex®

proven processing solutions

Media pumped:

■ Fats and oils

Diathermic oils, Emulsified oils, Fats,
Fuel oils, Glycerin, Lubricating oils, and
Soap products

■ Organic and inorganic products

Acids, Additives, Alcohol, Amines,
Detergents, Esters, Fat acids,
Formaldehyde and derivatives, Glycols,
Hardeners, Isocyanates, Molten sulfur,
Phenols, Plasticizers, Polyol, and
Silicones

■ Paints and pigments

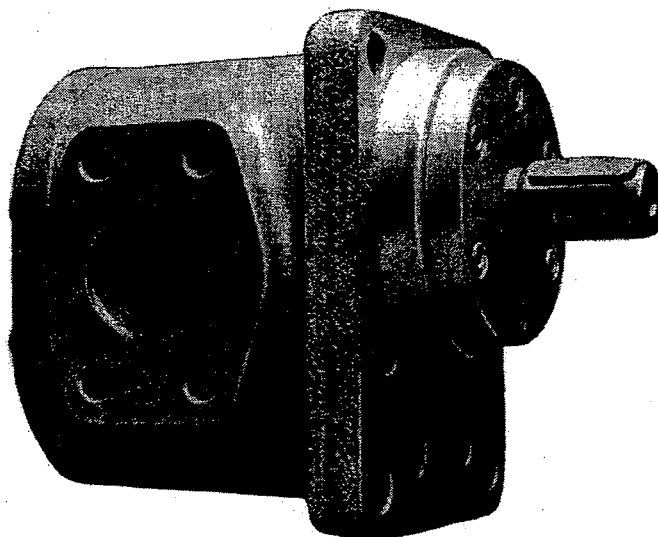
Epoxy resins, Inks, Pastes, Pigments in
solvents, Pigments in water, and
Varnishes

■ Polymers

Cellulose derivatives, Epoxy resins,
Phenolic resins, Plasticizers,
Polymers, and Prepolymers

■ Various

Additives, Bitumen, Gelatins, Slurries,
and Petroleum jelly



Efficient pumps for metering, transfer and pressure boosting for a wide range of fluids in industrial applications

Maag gear pumps can be found in
many unique applications.

The high precision of the
machining and the many choices
of construction materials give
Maag gear pumps metering,
reliability, and durability that are
unmatched in the industry.

Maag gear pumps are suitable for
pumping a great variety of liquids
with very distinct characteristics:
from the lubricant to the abrasive
product, with viscosities from 0.3
to 4,000,000 cP, with temperatures
from -22 to 608°F and with
pressures up to 5,000 psig.

Maag has always been
synonymous with high quality and
is certified ISO 9001.

industrial

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