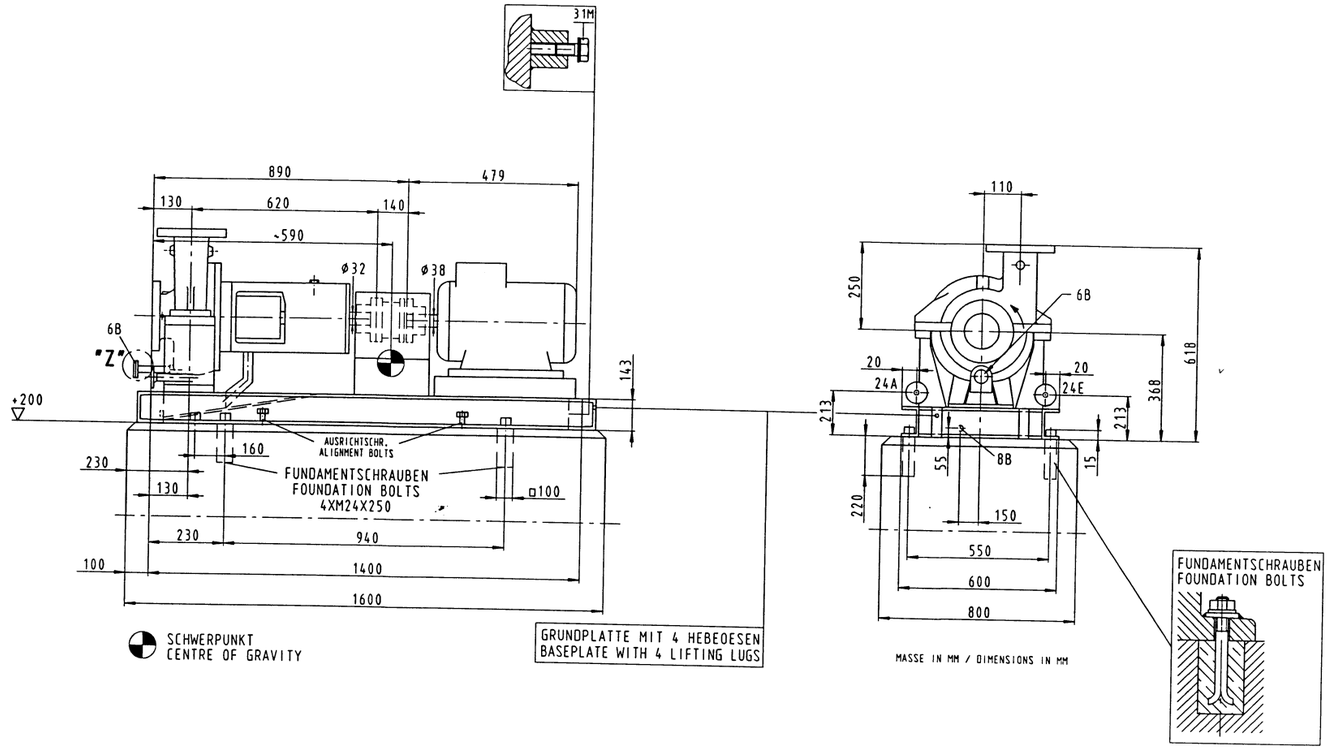
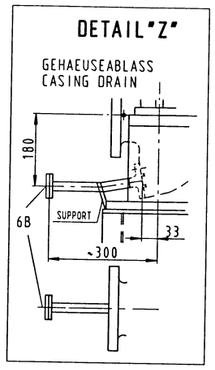
LEITUNGEN SPANNUNGSFREI ANSCHLIESSEN!
ZULAESSIGE MASSABWEICHUNGEN FUER:
ACHSHOEHEN FUER MASCHINEN — DIN 747
ANSCHLUSSMASSE FUER PUMPEN — DIN EN 735
MASSE OHNE TOLERANZANGABE - GRAUGUSSTEILE — DIN 1686 GTB18
MASSE OHNE TOLERANZANGABE - SCHWEISSTEILE — EN ISO 13920B
ALLGEMEINTOLERANZEN FUER BEARBEITETE TEILE — DIN ISO 2768-m

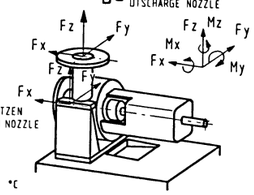
THE LINES MUST BE CONNECTED WITHOUT TRANSMITTING ANY STRESSES OR STRAIN!
PERMISSIBLE DEVIATIONS OF DIMENSIONS FOR:
AXIS HEIGHTS FOR MACHINES — DIN 747
CONNECTION DIMENSIONS FOR PUMPS — DIN EN 735
DIMENSIONS WITHOUT MENTION OF TOLERANCES - GREY CAST IRON COMPONENTS — DIN 1686 GTB18
DIMENSIONS WITHOUT MENTION OF TOLERANCES - WELDED COMPONENTS — EN ISO 13920B
GENERAL TOLERANCES FOR MASCHINED COMPONENTS — DIN ISO 2768-m





D = DRUCKSTUTZEN
DISCHARGE NOZZLE

S = SAUGSTUTZEN
SUCTION NOZZLE



TEMP.: 43 °C

ZULAESSIGE KRAEFTE UND MOMENTE ENTSPRECHEN MIN.2X API 610/8.
DIE ANGABEN GELTEN FUER STATISCHE ROHRLEITUNGSLASTEN.
BEI UEBERSCHREITUNG IST NACHPRUEFUNG ERFORDERLICH.
ADMISSIBLE FORCES AND MOMENTS CORRESPOND TO MIN.2X API 610/8.
DATA GIVEN BELOW ARE ONLY VALID FOR STATIC PIPING LOADS.
IF VALUES ARE EXCEEDED CHECK IS NECESSARY.

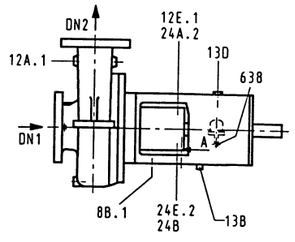
KRAEFTE, MOMENTE / FORCES, MOMENTS

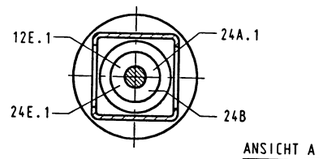
	SAUGSTUTZEN SUCTION NOZZLE				DRUCKSTUTZEN DISCHARGE NOZZLE				
KRAEFTE FORCES (N)	Fx	Fz	Fy	Fres	Fx	Fz	Fy	Fres	
	1780	1160	1430	2560	1430	1780	1160	2560	
MOMENTE MOMENTS (Nm)	Mx	Mz	My	Mres	Mx	Mz	My	Mres	
	920	710	460	1250	920	710	460	1250	

24E/24A	NPS1/2"	QUENCHFLUESSIGKEIT EIN/AUS - QUENCH LIQUID INLET/OUTLET	-	-	X	5	<0.5	-
31M	M10	ERDUNGSANSCHLUSS - EARTHING CONNECTION		-	X	-	-	-
24B	NPT 1/2	QUENCHFLUESSIGKEIT ABLASS - QUENCH LIQUID DRAIN	X	-	-	-	-	-
24E.2/24A.2	NPT 1/2	QUENCHFLUESSIGKEIT EIN/AUS - QUENCH LIQUID INLET/OUTLET	-	-	-	-	-	-
12E.1/12A.1	NPT 1/2	ZIRKULATIONSFL. EIN/AUS - CIRCULATION LIQUID INLET/OUTLET	-	-	X	-	-	-
88.1	NPT 1	LECKABLASS - LEAKAGE DRAIN	-	-	X	-	-	-
88	NPT 1	LECKABLASS GRUNDPLATTE - LEAKAGE DRAIN BASEPLATE	-	-	X	-	-	-
68	NPS1"	GEHAEUSEABLASS - CASING DRAIN	BLIND FLANGE	X	-	-	-	-
13B	NPT 1/2	OELABLASS - OIL DRAIN	X	-	-	-	-	-
13D	NPT 1/2	ENTLUEFTUNGSSTOPFEN - VENT PLUG	X	-	-	-	-	-
638	NPT 1/4	OELSTANDSREGLER - CONSTANT LEVEL OILER	WIRD LOSE MITGELIEFERT - LOOSE ITEM				-	-

ANSCHLUSS CONNECTION	GROESSE SIZE	BEZEICHNUNG DESIGNATION	MIT STOPFEN VERSCHLOSSEN/ CLOSED WITH SCREW PLUG	KUNDE/ CUSTOMER	KSB	ERF. MENGE/ QUANTITY REQU. L/MIN	ACTUAL PRESSURE BAR G	DESIGN PRESSURE BAR G
		GEWINDE NACH DIN ISO 228, TEIL 1 UND ISO 7/1 (ENTSPRICHT DIN 2999 TEIL 1) / THREAD ACC. TO DIN ISO 228, PART 1 AND ISO 7/1 (CONFORMING TO DIN 2999, PART 1)		SCHLIESST AN/ CONNECTED BY				

ANSCHLUESSE / CONNECTIONS — DIE AUSFUEHRUNG DES AUFTRAGES IST DURCH X GEKENNZEICHNET / THE EXECUTION OF THE ORDER IS MARKED BY X





ANSICHT A
VIEW A

24A	ASME B16.5 CL.300RF NPS1/2"	QUENCH OUT FLANGE API PLAN 62
24E	ASME B16.5 CL.300RF NPS1/2"	QUENCH IN FLANGE API PLAN 62
6B	ASME B16.5 CL.300RF NPS1"	PUMP DRAIN FLANGE
DN2	ASME B16.5 CL.300RF NPS1-1/2"	PUMP DISCHARGE FLANGE
DN1	ASME B16.5 CL.300RF NPS2"	PUMP SUCTION FLANGE
ANSCHLUSS CONNECTION	AUSFUEHRUNG DESIGN	REMARKS
FLANSCHE / FLANGES		

GRUNDPLATTENGROESSE BASEPLATE SIZE	ZN24259-7S
MOTORGROESSE MOTOR SIZE	SCHORCH KA7 132S-AB01G-V 2900RPM 5,5kW
KUPPLUNGSGROESSE COUPLING SIZE	FLENDER N-EUPEX H 95-140
GROESSEN / SIZES	

PUMPE	PUMP	136
GRUNDPLATTE	BASEPLATE	226
KUPPLUNG	COUPLING	9
ANTRIEB	DRIVE	41
-		-
-		-
GESAMT	TOTAL	412
GEWICHTE / WEIGHTS		KG

R ☐ Review for process conformity only
A ☒ No comments / work may proceed
P ☐ Comments noted, revise and resubmit / Work may proceed subject to incorporation of comments indicated
F ☐ Comments noted, revise and confirm revisions per P.A.R. / Work may proceed, subject to incorporation of comments indicated
X ☐ Revise and resubmit / work may not proceed
N ☐ Noted, not subject to on-shore / off-shore review

Permission to proceed does not constitute acceptance or approval of design details, calculations, analysis, test methods or materials developed or selected by the supplier and does not relieve supplier from full compliance with specifications and contractual obligations.

Linde Process Engineering and Contracting Division — Date: 12.12.01 — Dept.: GPD — Signature:
Energy Industries' Engineering and Design — Date: — Dept: — Signature:

06/12 10.12.2001 Didier R. Gallezot

-	1	2001-10-18	AS BUILT		DRESSEL	KOSMAK	SCHRM	WILTERUS
-	0	2001-08-02	1ST EDITION		DRESSEL	KOSMAK	SCHRM	WILTERUS
STATUS	ISSUE	DATE	DESCRIPTION		PRE. BY	CHK. BY	APP. BY	PROJ. ENGR.

DRAWING TITLE: GENERAL ARRANGEMENT DRAWING FOR SPENT CAUSTIC PUMP ITEM NO.: 10-P-2773 A/B

OWNER DWG. NO.: 10-VD-A1-RE-011-036-L — P.O. NO.: 2PB434
LINDE DWG. NO.: M-ZA 50045 — OWNER JOB CODE / PROJ. NO.: MPCOL / 7107904, MPCRE / 7057904
LINDE JOB CODE / PROJ. NO.: MARUN / 3110 1044

OWNER: NATIONAL PETROCHEMICAL COMPANY, MARUN PETROCHEMICAL COMPANY
PROJECT: C2+ RECOVERY AND GAS CRACKING PLANTS
CONTRACTOR: LINDE ENGINEERING AND CONTRACTING DIVISION — Energy Industries' Engineering and Design — NARGAN COMPANY

ZEICHNUNGS-NR/DRAWING NO. -	2001-10-18	KOSMAK	GEPR.	BESTELLER-NR./PURCHASER NO.: ITEM-NO.: 10-P-2773 A/B
CAD	2001-10-18	DRESSEL	1	BETREIBER-NR./CUSTOMER NO.: -
	2001-08-02	DRESSEL	0	
MASSSTAB/SCALE -	DATUM/DATE	NAME	AENDERUNG/REVISION	KSB AUFTRAGS-NR./KSB ORDER NO.: 9970089248
KSB	BAUREIHE-GROESSE/TYPE-SIZE: RPH 40-181			KSB WERK-NR./KSB SERIAL NO.: 6-N27-503917/1-2
	AUFSTELLUNGSPLAN INSTALLATION PLAN -			F 103579 — BLATT/SHEET 1 VON/OF 4