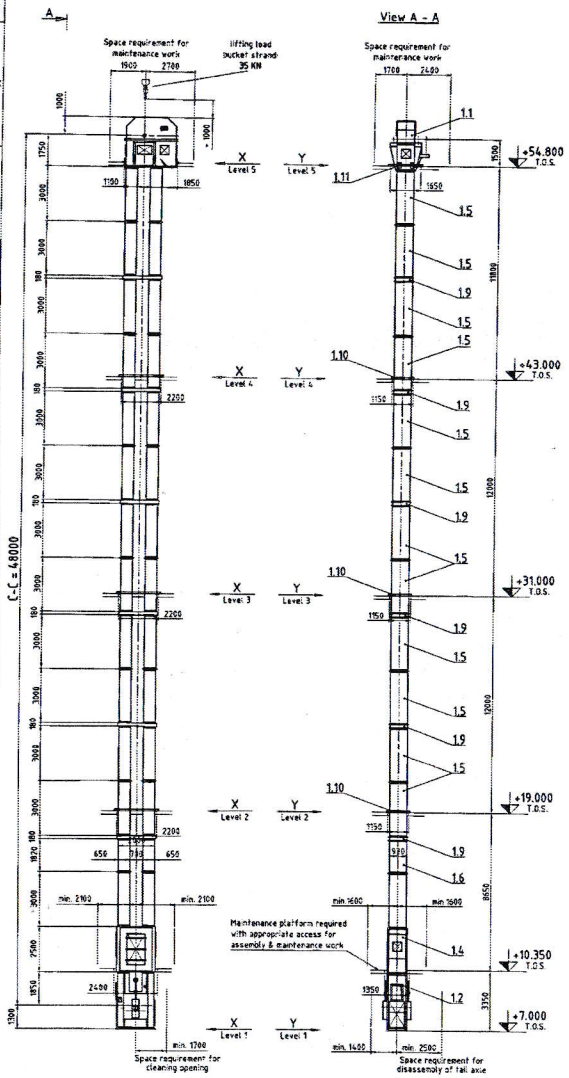
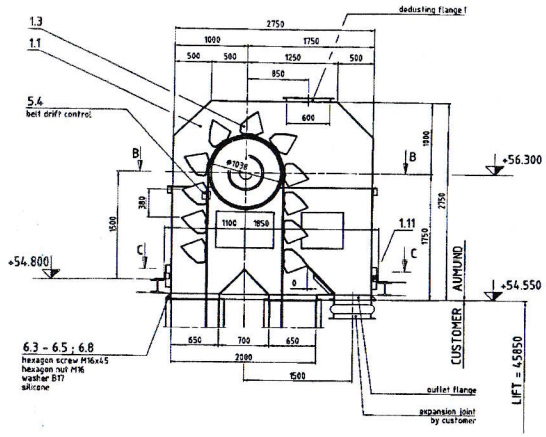
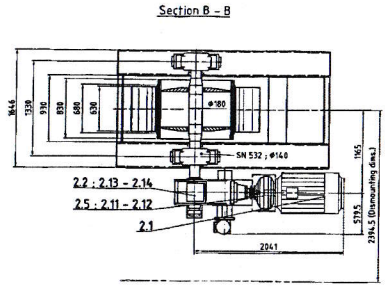
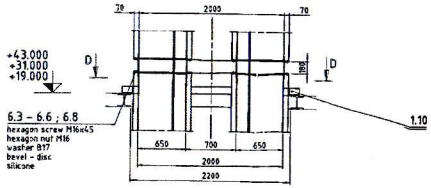


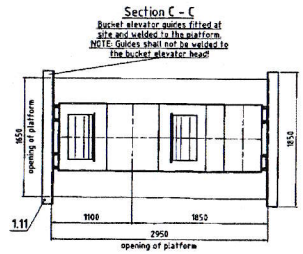
	Earthquake Loads [kN]	
	X, Y	Z
Level 1 +7.000	± 98,66 kN	± 184,33 kN
Level 2 +19.000	± 23,59 kN	
Level 3 +31.000	± 14,95 kN	
Level 4 +43.000	± 4,67 kN	
Level 5 +54.800	± 77,23 kN	

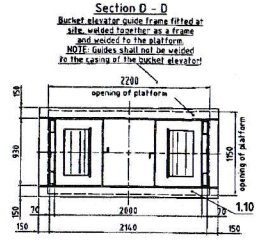
Horizontal loads calculated on the basis of Earthquake Rating: Zone5

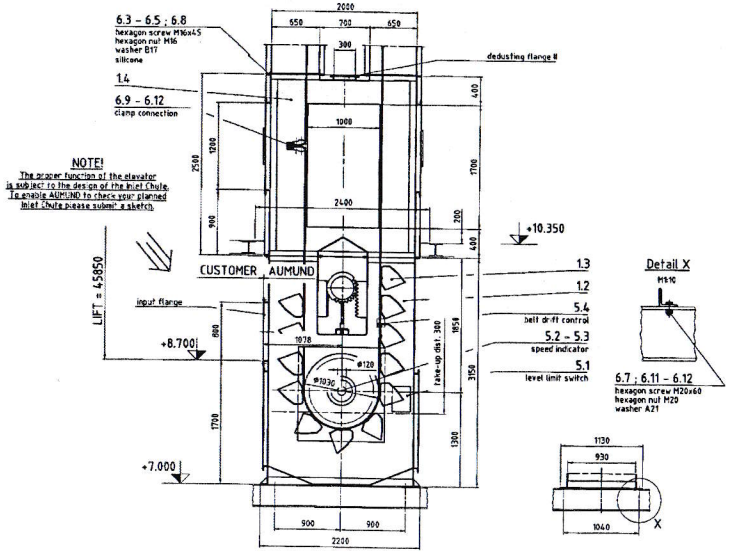


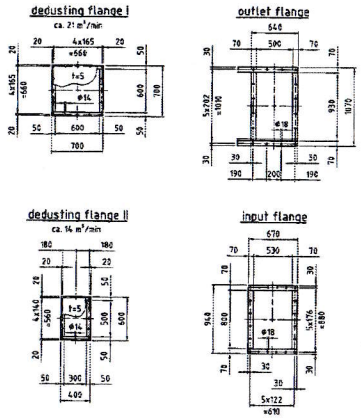












TECHNICAL DATA

PROJECT NO.	: 42293	ITEM NO.	:
BELT BUCKET ELEVATOR SIZE	: BW-G 630/320	BUCKET SPACING [mm]	: 380
DRIVE DRUM Ø [mm]	: 1000	FILLING RATE [%]	: 74
CENTRE DISTANCE [mm]	: 48000	MATERIAL	: Cement
BELT QUALITY	: H 12 D + 120°C	BULK DENSITY [t/m³]	: 0.8
CONVEYING CAPACITY [t/h]	: 250	PARTICLE SIZE [mm]	: 1
VELOCITY [m/s]	: 1.57	MATERIAL TEMP. [°C]	: 120
AMBIENT TEMPERATURE [°C]	: 45		

REQUIRED DRIVE DATA

DRIVE SHAFT CAPACITY [kW]	: 36.2
SPEED OF ROTATION [rpm]	: 29.0
TORQUE ON DRIVE SHAFT [kNm]	: 12.1

DRIVE DATA

2.1	AC-MOTOR	: ABB	SPEED OF ROTATION [rpm]	: 1482
	STANDARD	: IEC	SHAFT SIZE [Ø x l mm]	: 75 x 140
	TYPE AND SIZE	: 2BMS	INSULATION	: F/B
	CAPACITY [kW]	: 75	TYPE OF PROTECTION	: IP54
	VOLTAGE [V]	: 380	STRUCTURAL FORM	: B3
	FREQUENCY [Hz]	: 50	WEIGHT [kg]	: 590
	SUPPLIER	: Customer		
2.2	BEVEL-HELICAL GEAR UNIT	: FLENDER	WITH FAN	: YES
	OUTPUT SHAFT DESIGN	: Hollow Shaft	WITH BACKSTOP	: YES
	GEARBOX SIZE	: B3DH8	NR. QUANTITY [t]	: 17
	NOM. POWER RATING [kW]	: 88	INPUT SHAFT [Ø x l mm]	: 50 x 90
	NOM. RATIO	: 54	OUTPUT SHAFT [Ø x l mm]	: 130 x 450
	DESIGN	: B	SENSE OF ROTATION	: left
	SUPPLIER	: AUMUND	OPERATING WEIGHT [kg]	: 870
	AUXILIARY GEAR UNIT for	empty buckets	OVERRUNNING CLUTCH	: YES
	GEARBOX TYPE AND SIZE	: KZ 48	SPEED MONITOR	: YES
	MOTOR TYPE AND SIZE	: M9LA-W	NR. QUANTITY [t]	: 2.3
	POWER [kW]	: 15	OPERATING WEIGHT [kg]	: 65
	SUPPLIER	: AUMUND		
2.5	TURBO COUPLING	: FLENDER	BORE INPUT SIDE [Ø x l mm]	: 75 x 140
	TYPE AND SIZE	: FLUDEX-FAD 450	BORE OUTPUT SIDE [Ø x l mm]	: 50 x 110
	SUPPLIER	: AUMUND	OPERATING WEIGHT [kg]	: 72

CONTROL EQUIPMENT

5.1	LEVEL LIMIT SWITCH IN THE BUCKET ELEVATOR BOOT	
	TYPE	: ADJUSTEST (MEPA / PESA)
	VOLTAGE	: 115 - 230 V AC ; 24 - 250 V DC
5.2	PROXIMITY SWITCH MOVEMENT DETECTOR	
	TYPE	: NJ5-18-GK-N-150 (Pepperl & Fuchs)
	VOLTAGE	8 V DC Namur (KFU8-EWB-10)
5.3	SPEED MONITOR INSTALLED IN THE MOTION CONTROL CENTRE	
	TYPE	: KFU8-DWB-1.D (Pepperl & Fuchs)
	VOLTAGE	: 48 - 253 V AC ; 20 - 90 V DC
5.4	PROXIMITY SWITCH FOR STRAIGHT-RUN CONTROL OF BELT	
	TYPE	: NCB15-U3-N (Pepperl & Fuchs)
	VOLTAGE	: 20 - 253 V AC ; 50 - 300 V DC
2.11	NON-CONTACTING THERMAL SWITCH UNIT	
	TYPE	: EDC-M18x15 / BMS-EMB-BY0 (Flender)
	VOLTAGE	8 V DC Namur (EWB)
2.12	EVALUATOR INSTALLED IN THE CONTROL ROOM	
	TYPE	: EWD/20-256VUC (Flender)
	VOLTAGE	: 20 - 256 V AC / DC
2.13	SPEED INDICATOR IN THE AUXILIARY DRIVE UNIT	
	TYPE	: BMS-EMB-YT (Turck / Flender)
	VOLTAGE	8 V DC Namur (KFU8-EWB-10)
2.14	SPEED MONITOR FOR AUXILIARY DRIVE INSTALLED IN THE MOTION CONTROL CENTRE	
	TYPE	: KFU8-EWB-10 (Pepperl & Fuchs)
	VOLTAGE	: 48 - 253 V AC ; 20 - 90 V DC

Our Project 42293

0			Gear unit make FLENDER instead of SEW	30.03.2006 ABR/ABA/AT
A			Dwg. revised	28.06.2006 ABR/ABA/AT
Index/Ind.	Responsible/Verantw.	Autorisation/Zeichn.	Änderung	Date/Datum Name

CAD - Zeichnung, Änderung nur im CAD - System zulässig!

Customer/Kunde	Gurtbecherwerk	Order No./Auftrag-Nr. 112060	Drawing-Nr. 300S0596
Description/Benennung	Belt Bucket Elevator BW-G 630/320	Sheet/Blatt-Nr. 1	Index B

	prepared/bearbeitet	date/Datum	verified/geprüft	date/Datum	released/freigegeben
Name	ABR/ABA/AT	12.03.2006	ABR/ABA/AT	27.09.2006	ABR/ABA/AT
Date	ABR/ABA/AT	12.03.2006	ABR/ABA/AT	27.09.2006	ABR/ABA/AT

AUMUND