



**KHORASAN PETROCHEMICAL
WASTE WATER TREATMENT PLANT**



**DOCUMENT TITLE:
MECHANICAL DEWATERING DATASHEET**

DOCUMENT NUMBER: 96-MR-DS-16-D01

Rev. No.: D01

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 <p>شرکت پتروشیمی خراسان Khorasan Petrochemical Co.</p>	KHORASAN PETROCHEMICAL WASTE WATER TREATMENT PLANT	 <p>tara engineering co. شرکت مهندسی تارا</p>
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MECHANICAL DEWATERING DATA SHEET

GENERAL DATA		
PLANT	WASTE WATER TREATMENT	
ITEM TAG	MD-9601 MECHANICAL DEWATERING	
QUANTITY	1 (1 DUTY + 1 STAND BY)	
TYPE	COMBI (Belt Thickener + Belt filter Press)	
LOCATION	INDOOR	
MANUFACTURER	T.B.D.	
MODEL	T.B.D.	
CONSTRUCTION CODE	STD MFR	
OPERATING DATA		
FLUID /pH	Biological Sludge / 6-9	
TYPE	Not Hazardous, Not Flammable, Non Corrosive	
TEMPERATURE DESIGN	°C	AMBIENT (2-42)
DENSITY / VISCOSITY	kg/dm3/mm2/s	1,02 approx / 1 approx
OPERATING DATA		
SERVICE	DEWATERING BUILDING	
INLET SLUDGE CONCENTRATION	%	0.8
FEED FLOW RATE	m3/h	35
DRY SOLID	Kg/h	280
WORKING HOURS	h/d	8
WORKING DAYS	d	7
FILTERED SLUDGE REQUIRED CONCENTRATION	%	Min. 20%
POLYMER SPECIFIC CONSUMPTION	Kg active matter /ton Dry Solid	5 (*)
WASHWATER CONSUMPTION	m3/h	13.5 (*)
COMPRESSED AIR CONSUMPTION	m3/h	2 (*)
CONSTRUCTION DATA / MATERIALS		
<i>GRAVITY BELT THICKENER</i>		
BELT WIDTH	mm	1500 (*)
DIMENSION (LXWXH)	mm	3250 x 2000 x 1430 mm (*)
BELT WIDTH	mm	1500 (*)
FILTRATION LENGTH	mm	3000 (*)
WASHWATER FLOWRATE	m3/h	4.5 m3/h @ 7 bar (*)
BELT MATERIAL	POLYESTER, MONOFILAMENT (*)	

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FRAME & STRUCTURAL ELEMENT	AISI 304L	(*)
BELT GUIDE & SUPPORT	AISI 304L	(*)
SCRAPER BLADE HOLDER	AISI 304L	(*)
TOTAL NUMBER OF ROLLERS	2	(*)
<u>BELT FILTERPRESS</u>		
BELT WIDTH	mm 1500	(*)
DIMENSION (LXWXH)	mm 2230 x 2400 x 1640 mm	(*)
BELT WIDTH	mm 1500	(*)
WASHWATER FLOWRATE	m3/h 9 m3/h @ 7 bar	(*)
BELT MATERIAL	POLYESTER	(*)
FRAME & STRUCTURAL ELEMENT	AISI 304L	(*)
BELT GUIDE & SUPPORT	AISI 304L	(*)
SCRAPER BLADE HOLDER	AISI 304L	(*)
TOTAL NUMBER OF ROLLERS	18	(*)
DRIVE		
MOTOR		
<u>GRAVITY BELT THICKENER</u>		
MANUFACTURER / SUPPLIER	T.B.D. /	
SIZE / SHAPE		(*)
PROTECTION DEGREE / INSUL. CLASS	IP 55 / F	
RATED POWER	kW 0.75	(*)
VOLT / PHASES / CYCLES	400 / 3 / 50	
N° POLES / SPEED	/rpm	(*)
STARTING	DOL (DIRECT ON LINE)	
COOLING / HEATING	Not Required	
INSULATED BEARINGS	YES	
VFD COMPATIBLE	YES/ INCLUDED	
HAZARDOUS AREA CLASSIFICATION	NON HAZARD	
<u>BELT FILTERPRESS</u>		
MANUFACTURER / SUPPLIER	T.B.D. /	
SIZE / SHAPE		(*)
PROTECTION DEGREE / INSUL. CLASS	IP 55 / F	
RATED POWER	kW 0.55	(*)
VOLT / PHASES / CYCLES	400 / 3 / 50	
N° POLES / SPEED	/rpm	(*)

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STARTING	DOL (DIRECT ON LINE)
COOLING / HEATING	Not Required
INSULATED BEARINGS	YES
VFD COMPATIBLE	YES/ INCLUDED
HAZARDOUS AREA CLASSIFICATION	NON HAZARD
RATED POWER	kW (*)
VOLT / PHASES / CYCLES	400 / 3 / 50
N° POLES / SPEED	/rpm (*)
STARTING	DOL (DIRECT ON LINE)
COOLING / HEATING	Not Required
INSULATED BEARINGS	YES
VFD COMPATIBLE	-
HAZARDOUS AREA CLASSIFICATION	NON HAZARD
VARIOUS	
ANCHORING BOLTS SUPPLY	Included
SS NAMEPLATE FIXED ON THE UNIT	Included
CE MARKING	-
WEIGHT	KG
DRAWINGS	
OUTLINE DWG. N°	(*)
SECTION DWG. N°	(*)

(*) MFR to be filled-in