




OWNER:  PETROCHEMICAL RESEARCH AND TECHNOLOGY CO.	PROJECT: MTP CATALYST FOR PVM TECHNOLOGY CATALYST CODE: ZEOTECH-RT/ T. HAS 200 & S. HAS 200	PROJECT NO.: 0870349904
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**BEAD MILL PACKAGE
B-11
PROCESS DATASHEET**

PREPARED:	CHECKED:	APPROVED:	DATE:	REV.:
S.RAJABI	S.ARABAHMADI	F.YARIPOUR	1400.01.22	0

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Designation:		SEED BEAD MILL		Item No.:	B-11	No. Req.:	1	Page:	2 / 3
PROCESS DATA									
1	Quantity operat./stand-by	1 / 0							
2	Belonging to Equipment	Bead Mill							
3	Location	Indoor							
4	Process fluid	Slurry							
5	Physical condition	Solid/Liquid							
6	Grinding volume	0.23 m ³							
7	Grinding time	1 h							
8	Grinding media:								
9	H2O	68.4 wt%							
10	SiO2	11.4 wt%							
11	TPABr	17.9 wt%							
12	NaOH	2.3 wt%							
13	Solids content	10 – 15 %							
14	Health / Fire hazard	3 / 0							
15	Explosion proof	NO							
16	Operating temperature	amb. °C							
17	Operating pressure	atm. barg							
18	Design temperature	60 °C							
19	Design pressure	2 barg							
20	Density	1080 kg/m ³							
21	Viscosity	9 – 10 cP							
22	pH-Value	9 – 11							
23	Feed size	>5 µm							
24	Finish size	<1 µm							
25									
TECHNICAL DATA									
26	Grinding System:								
27	Grinding chamber:								
28	Grinding chamber volume	By vendor m ³							
29	Inner chamber material	Silicon carbide							
30	Outer chamber material	SS 304							
31	Grinding rotor material	By vendor							
32	Grinding chamber working pressure	By vendor barg							
33	Grinding chamber dismantle	Easy maintenance							
35	Grinding rotor and main shaft:								
36	Rotor structure	Pin type							
37	Main motor speed	By vendor rpm							
38	Dispersing linear speed	By vendor m/s							
39	Main shaft material	By vendor and corrosion resistance							
34	Sealing System:								
40	Mechanical sealing:								
41	Mechanical sealing type	Double							
42	Dynamic-Static ring material	By vendor and high wear resistance							
43	Mechanical sealing support material	SS 304							
44	O ring Material	Corrosion resistance							
45	Mechanical sealing coolant	Water or solvent which could compatible with the material							
46	Mechanical sealing cooling method	Recycled cooling							
47	Cooling protection	Monitor via level gauge							
48	Max. feeding pressure	By vendor barg							
49									
50									
51									
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Designation:		SEED BEAD MILL	Item No.:	B-11	No. Req.:	1	Page:	3 / 3
TECHNICAL DATA								
1	Sealing System: (continued)							
2	Pressure balancing tank:							
3	Thickness	By vendor				mm		
4	Material	SS 304						
5	Equipment consists		With pressure gauge, liquid level sight glass, safety valve etc					
6								
7	Material transportation system:							
8	Material feeding:							
9	Pump type	By vendor						
10	Air pressure supply for pump	By vendor				barg		
11	Pipe material	Corrosion resistance						
12	Discharge separator:							
13	Static discharging	Centrifugal filter screen						
14	Screen gap	By Vendor				mm		
15	Separate material	By Vendor						
16	Cooling system:							
17	Cooling mode:							
18	Perfect temperature control		1) Outer chamber cooling water circulate route					
19			2) End cap					
20			3) Mechanical sealing					
21			4) Bearing seat cooling					
22	Water supply:							
23	Cooling water	27 - 37				°C		
24	Water flow	By vendor				m ³ /h		
25	Water pressure	By vendor				barg		
26	Air supply system:							
27	Compressed air:							
28	Air supply pressure	By vendor				barg		
29	Air source handling							
30	Air flow	By vendor				l/min		
31	Electrical and Control system:							
32	Driving motors:							
33	Motor	By vendor				kW		
34	Motor brand	By vendor						
35	Motor voltage	By vendor				V		
36	Motor starting mode	Soft Start						
37	Electrical control:							
38	System control*		Buttons (air pump start ,air pump stop, speed adjusting with VFD, mill start, mill stop, E-stop, indicating light etc)					
39								
40	Grinding pressure control	Pre-setted value, with electric contacting pressure meter						
41	Grinding temperature control	Pre-setted value, with electric contacting pressuremeter						
42	* Possibility to connect to DCS control system							
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
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S.RAJABI		S.ARABAHMADI		F.YARIPOUR		1400.01.22		0

<p>شماره صفحه ۱</p>	<p>پیوست دیتاشیت مناقصه دو مرحله‌ای (خرید دستگاه Slurry Bead Mill)</p>	
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سایر الزامات

- ۱- نوع روتور استراکچر باید توانایی تولید دوغاب با اندازه ذرات ذکر شده در دیتا شیت را داشته باشد.
- ۲- جنس گریندینگ چمبر باید در مقابل خوردگی pH و سیلیس مقاوم بوده و از جنس سرامیک زیرکونیا باشد.
- ۳- سیستم خنک‌کاری چمبر دستگاه به گونه‌ای طراحی شده باشد که دمای دوغاب را کنترل کرده و از وارد کردن آسیب به دستگاه جلوگیری کند.
- ۴- نوع و جنس مکانیکال سیلینگ و سیستم خنک‌کاری آن به گونه‌ای باشد که طول عمر حداقل دو سال را داشته باشد.
- ۵- جنس روتور و بیدها باید از سرامیک زیرکونیا باشد تا در مقابل خوردگی مقاوم باشد و فرایند CIP (Cold Isostatic Press) بر روی آن‌ها انجام شده باشد.