



उत्पाद मानक

TG 60648

PRODUCT STANDARD

पृष्ठ 5 का 1

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TORSIONALLY STIFF FLEXIBLE SHAFT COUPLING

1. APPLICATION:

The Flexible Shaft Coupling is required to be coupled between Drive Motor and Torque Flange to compensate for the radial, axial and angular misalignments between the two and to dampen torsional vibrations from Drive Motor.

2. SCOPE OF SUPPLY:

The complete Flexible Coupling unit comprising of disc packs, spacer, hubs, etc. shall be supplied in duly dynamically balanced condition.

3. TECHNICAL REQUIREMENTS:

- The Flexible Coupling is required to be used with a 12 MW synchronous motor fed from Variable Frequency Drive System (VFD). The Flexible Coupling should take care of the torque pulsations caused by VFD operation.
- The Flexible Coupling should be compatible with Torque Flange Model T10FH, Make: HBM, Germany, which would be used for measurement of power transmitted by the Drive Motor.
- The Flexible Coupling should be suitable for transmitting torques up to 50kNm (Rated Torque) at Rated Speed of $3000^{+2\%}$ RPM and should also be capable of withstanding torques up to 165 kNm encountered momentarily during testing of Turbogenerators.
- The Flexible Coupling should be compact; its overall length should preferably be within 500 mm.
- The Flexible Coupling should be suitable for both directions of rotation.
- The Flexible Coupling should be balanced to Quality Grade G 2.5 as per ISO:1940 or equivalent standard.

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				अनुवादक TRANSLATED BY	
हस्ताक्षर एवं दिनांक SIGN & DATE				निर्माणकर्ता WORKED BY	R.C.Sharma
				जांचकर्ता CHECKED BY	S.D.Nagar
	सहमत विभाग AGREED DEPTT.	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	पर्यवेक्षणकर्ता SUPERVISED BY	R.C.Bajpai
सामग्री सूची संख्या INVENTORY NO.				स्वीकृति : APPROVED : KR Gupta AGM (EME)	
				निर्माण : PREPARED EME	जारी : ISSUED EME
					दिनांक : DATE 05.02.2009

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समग्री सूची संख्या को अधिकृत करता है । SUPERSEDES INVENTORY NO.		<div>4. MOUNTING ARRANGEMENT:</div> <div><div>i)</div><div>One end of the Flexible Coupling shall be coupled to Drive Motor Flange (BHEL scope) which shall be made to suit the Flexible Coupling. For this purpose, mounting details of Flexible Coupling at Drive Motor end shall have to be indicated by the vendor in their offer.</div></div> <div><div>ii)</div><div>The other end of the Flexible Coupling shall be coupled to the Torque Flange. Overall dimensions and mounting details of the Torque Flange are indicated in Figure-1.</div></div> <div><div>iii)</div><div>Outline sketch of the setup indicating the positions of Drive Motor, Flexible Coupling, Torque Flange, Stub Shaft and Turbogenerator is shown in Figure-2.</div></div> <div><div>iv)</div><div>Adaptor Flanges (if required) and Fasteners for mounting the Flexible Coupling to the Torque Flange shall be supplied by the Flexible Coupling vendor.</div></div> <div>5. TECHNICAL DATA:</div> <div>Technical Data Sheet which includes the following parameters should be furnished along with the offer:</div> <div><div>1)</div><div>Nominal/Rated Torque (kNm)</div></div> <div><div>2)</div><div>Safe Overload Capacity (kNm)</div></div> <div><div>3)</div><div>Breaking Torque (kNm)</div></div> <div><div>4)</div><div>Speed range (RPM)</div></div> <div><div>5)</div><div>Rated Temperature Range (°C)</div></div> <div><div>6)</div><div>Torque Stiffness (Nm/rad)</div></div> <div><div>7)</div><div>Weight of Flexible Coupling (kg)</div></div> <div><div>8)</div><div>Axial Load Limit</div></div> <div><div>9)</div><div>Lateral Load Limit</div></div> <div><div>10)</div><div>Misalignments permissible</div></div> <div><div>11)</div><div>Moment of inertia</div></div> <div>6. INSPECTION:</div> <div>Inspection shall be carried out by BHEL or their authorized representative at supplier's works.</div>			
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		निर्माणकर्ता Worked by		R.C. Sharma	5.2.09
		जांचकर्ता Checked by		S.D.Nagar	5.2.09



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PRODUCT STANDARD

पृष्ठ 5 का 3

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स्वत्वाधिकार एवं गोपनीय

इस प्रलेख में दी गई सूचना भारत भारती इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

हस्ताक्षर एवं दिनांक

SIGN & DATE

सामग्री सूची संख्या
INVENTORY NO.

सामग्री सूची संख्या
को अधिकारित करता है।
SUPERSEDES
INVENTORY NO.

दिनांक एवं हस्ताक्षर
SIGN & DATE

7. INSTALLATION & COMMISSIONING:

Supplier shall provide services for installation and commissioning of the Flexible Coupling at BHEL works. The supplier shall indicate well in advance any input (material or otherwise) that is required from BHEL for installation of the system. The supplier shall indicate the number of days required for installation & commissioning of the Flexible Coupling in their offer.

8. DOCUMENTS:

Documents to be submitted along with the technical offer:

- Detailed catalogue
- Dimensional drawing of the Flexible Coupling
- List of organizations to whom Flexible Couplings of similar capacities have been supplied along with their ratings

निर्माणकर्ता

R.C. Sharma

Worked by

जांचकर्ता

S.D.Nagar

Checked by

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5.2.09

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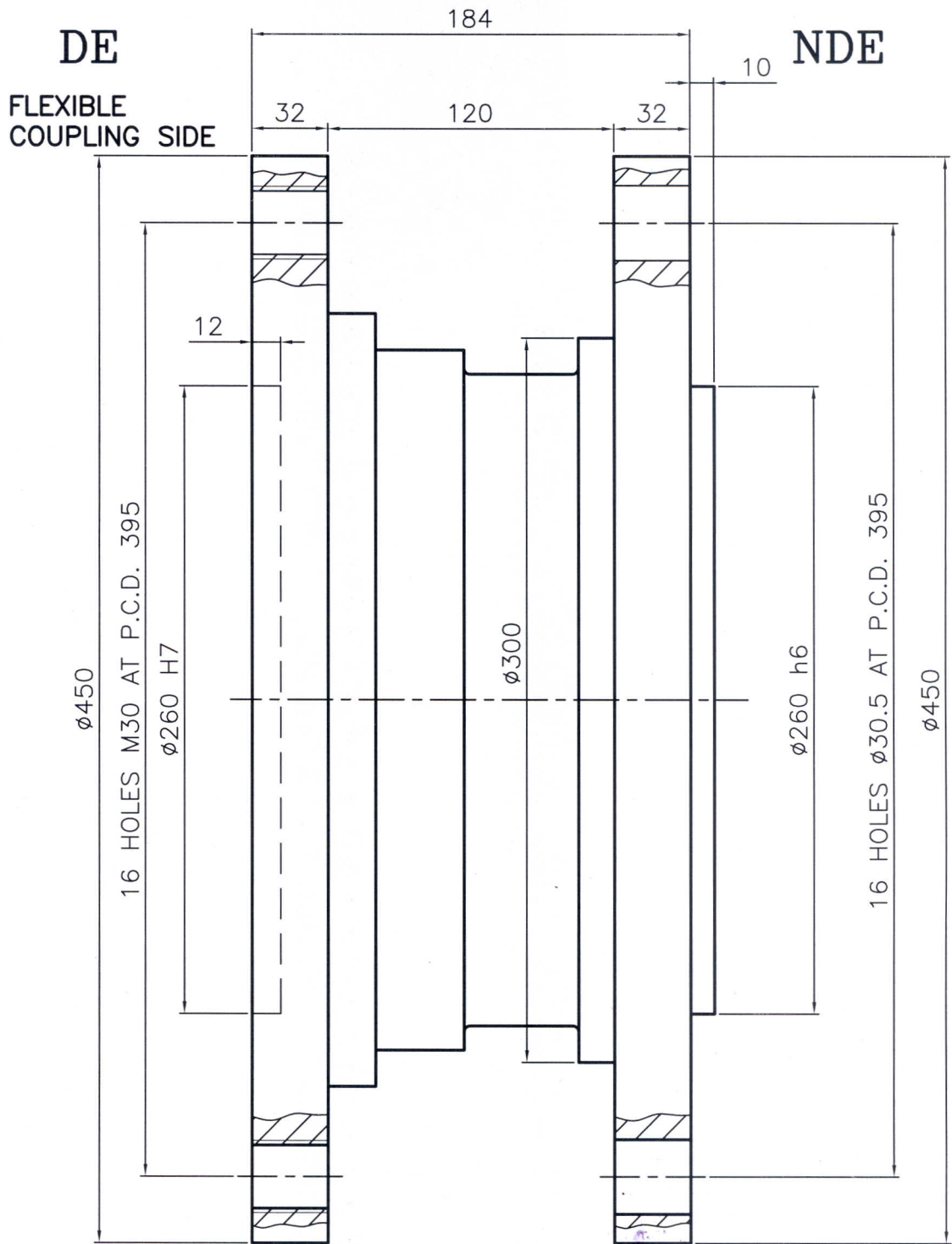


FIGURE-1

OUTLINE DRG. OF
TORQUE FLANGE
MODEL : T10FH
MAKE : HBM

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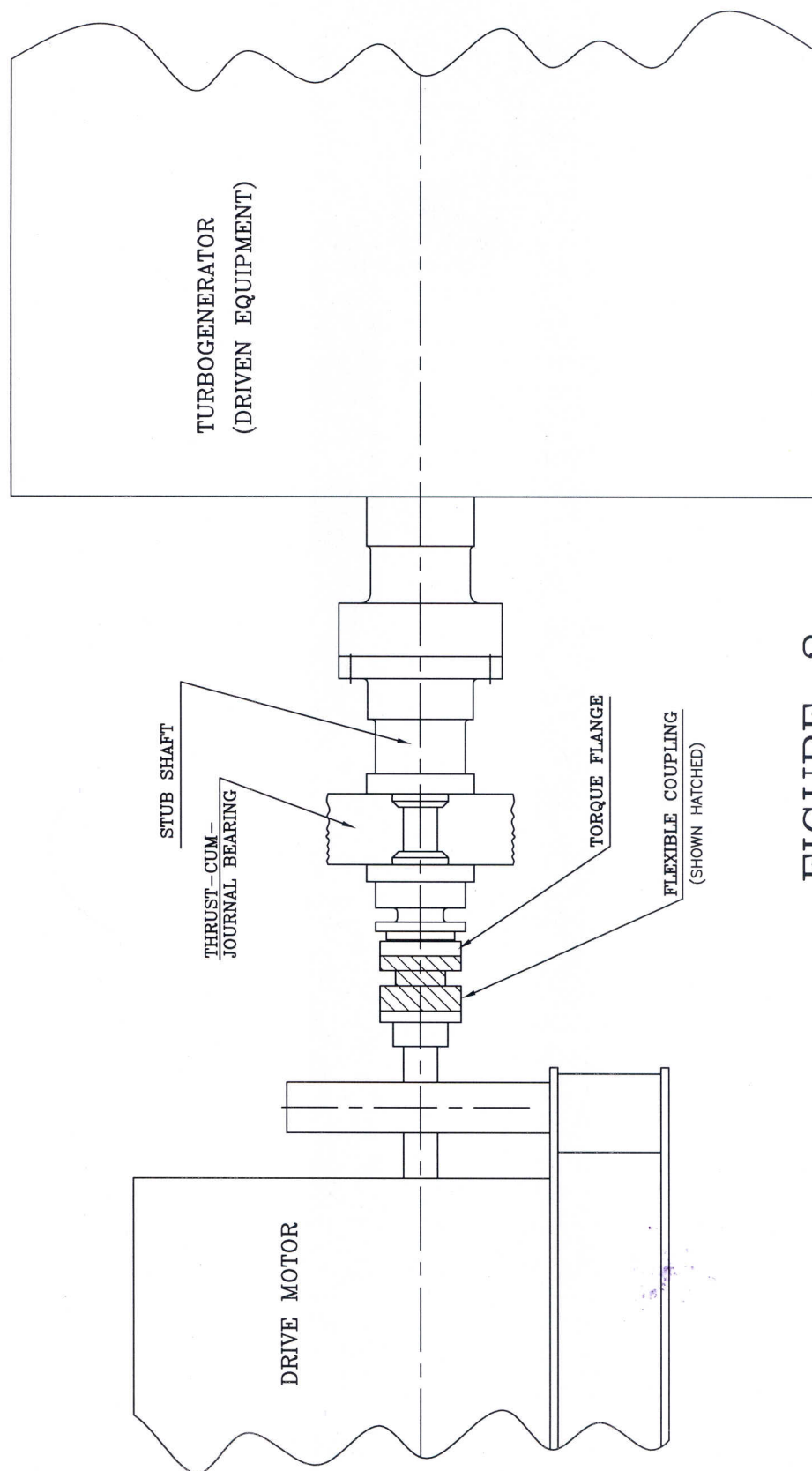


FIGURE-2

OUTLINE SKETCH SHOWING THE MOUNTING LOCATION OF FLEXIBLE COUPLING

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