	Component Enclosure		Hydraulic Variable Displacement Pump		Heat Exchanger		ELECTRICAL MOTOR		Flow Control Valve
	Working Line		Reducing Valve		Expansion Thermometer With Alarm Contact		VENTILATOR		Water Shutt-Off Valve with Electric Actuator
	Pilot Line		Direction Control Valve		Oil Level & Temperature Indicator		ELECTRICAL BOX		
	Line Crossing		Proportional Throttle Valve		Air-Breather		LIMIT SWITCH		
	Line Joining		Direction Control Valve- Pilot Operated		Level Switch		ELECTRICAL HEATER		
	Reservoir		Direction Control Valve- Pilot Operated		Temperature & Water Saturation Sensor		THERMOSTAT		
	Flexible Pipe		Proportional Relief Valve		Flow Meter		THERMOCOUPLE		
	Flexible Joint		Check Valve		Pressure Transmitter		Double Acting Cylinder		
	Bell Housing		Suction Filter		Test Point		Bladder Accumulator		
	Motor/Pump Coupling		Pressure Filter		Shuttle Valve		Room Light		
	Gate Valve Norm. Open Gate Valve Norm . Close		Return Line Filter		Magnet				
	Ball Valve Norm. Open Ball Valve Norm . Close		Suction Strainer		Pressure Gauge				
	Hydraulic Fixed Displacement Pump		Relief Valve						

REV.	DATE	DESCRIPTION	PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE
Z	06/2019	AS BUILT	ASB	KHALILPOOR	SHAGHAGHI	MOHAMMADZADEH
5	12/2016	ISSUE FOR CONSTRUCTION	IFC	MUSAVI	SHAGHAGHI	MOHAMMADZADEH
4	10/2015	ISSUE FOR CONSTRUCTION	IFC	KHALILPOOR	PARVANI	KIOMARSI
3	03/2015	ISSUE FOR CONSTRUCTION	IFC	KHALILPOOR	PARVANI	KIOMARSI
2	09/2014	ISSUE FOR CONSTRUCTION	IFC	KHALILPOOR	PARVANI	KIOMARSI
1	08/2014	ISSUE FOR APPROVAL	IFA	KHALILPOOR	PARVANI	KIOMARSI

Project: KOWSAR GISD MEGA MODULE PROJECT

Client: شرکت توسعه آهن و فولاد گل گهر G.I.S.D.Co.

Contractor: شرکت معدنی فلزی و مهندسی MMTE MINES & METALS TECHNOLOGICAL ENGINEERING CO.

Client's Project	Project Code	Main Contractor	Area Code	Plant Group	Equipment Code	Document Type	Eng. Discipline	Serial No.
GISD	7-2	119	1002	7	AA	04	P	108

	SIGNATURE	DATE
DESIGNED	MMTE	12/2016
PREPARED	MUSAVI	12/2016
CHECKED	SHAGHAGHI	12/2016
APPROVED	MOHAMMAD ZADEH	12/2016

designation: PIPING & INSTRUMENTATION DIAGRAM FURNACE EQUIPMENT HYDRAULIC SYSTEM

drawing-No.: KGMMPC00M5108

repl. for: repl. by :

SCALE: AS SHOWN | REV.: Z | SIZE: A3 | SHEET: 1/2 | CONT. & PROJ. NO: 92/5499

Confidential:This document discloses proprietary information. It may not be reproduced nor disclosed any person, nor used for any purpose, except wiht the written permission of MMTE Co