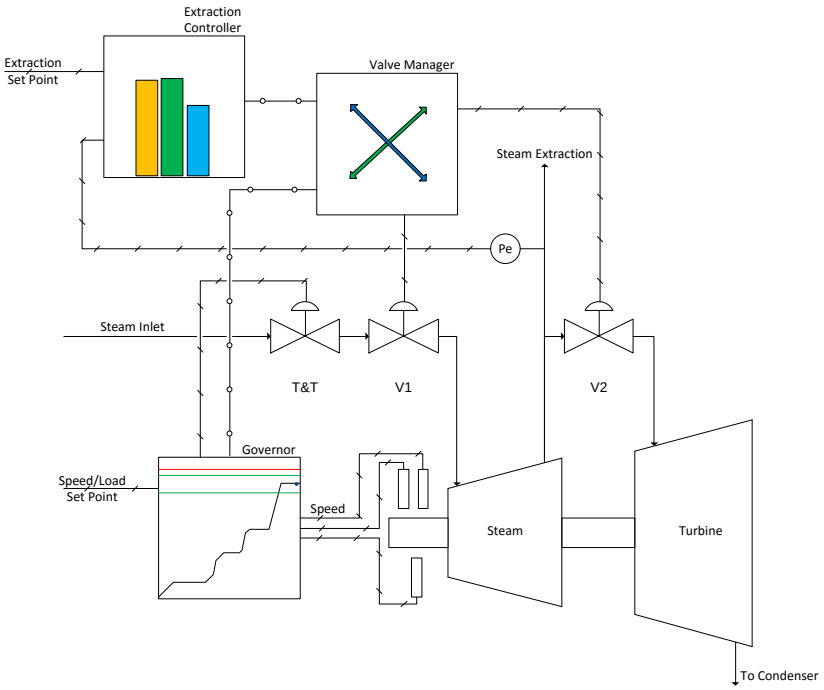


STIG
Steam Turbine Integrated Governor

The TMC Steam Turbine Integrated Governor (STIG) provides a cost efficient solution for Steam Turbines, which can be operated from anywhere, on a plate.



The TMC STIG controls any number of Steam Turbines which can be Condensing, Extraction, Double Extraction, Admission, Induction, Inlet Pressure, Back Pressure or a combination.

The TMC STIG includes 4 Start Curves per Turbine, each with 4 Idles and 3 Critical Bands.

The STIG uses TMC 3D control technology and includes the following control per turbine:

- **Speed**
- **Load**
- **Cascade**
- **Auxiliary**
- **Extraction**
- **Double Extraction**
- **Admission**
- **Induction**
- **Inlet Pressure**
- **Back Pressure**

The TMC STIG has the following per Turbine I/O which can be used for a choice of the following duties:

4 to 20mA Analogue Outputs	4 to 20mA Analogue Inputs	24VDC Digital Outputs	24VDC Digital Inputs	Speed Inputs
Inlet Valve 1	Speed SP	Tripped = OC	Trip = OC	Speed 1
Inlet Valve 2	Pressure PV	Alarm = OC	Reset = CC	Speed 2
Inlet Valve 3	Pressure SP	Tripped = CC	Start = CC	Speed 3
Inlet Valve 4	2nd Pressure PV	Alarm = CC	Raise = CC	Speed 4
Extraction Valve 1	2nd Pressure SP	Stopped = CC	Lower = CC	Speed 5
Extraction Valve 2	Auxiliary PV	Running = CC	Stop = OC	Speed 6
Extraction Valve 3	Auxiliary SP	Idle 1 = CC	Hold = CC	
2nd Extraction Valve 1		Idle 2 = CC	Continue = CC	
2nd Extraction Valve 2		Idle 3 = CC	Cold = CC	
Admission Valve 1		Idle 4 = CC	Cool = CC	
Admission Valve 2		Cascade = CC	Warm = CC	
Admission Valve 3		Cold = CC	Hot = CC	
Induction Valve 1		Cool = CC	Remote = CC	
Induction Valve 2		Warm = CC		
Induction Valve 3		Hot = CC		
Speed PV		Remote = CC		
Speed SP		Cascade = CC		
Pressure PV		On Load = CC		
Pressure SP				
2nd Pressure PV				
2nd Pressure SP				
Auxiliary PV				
Auxiliary SP				

The same duty can be selected for 2 or more Analogue Outputs for Turbines with valves working in parallel.

The STIG is supplied on a mounting plate designed to be easily retrofitted in to an existing panel. It can be supplied in a range of panels and other types of enclosures*.

The TMC STIG is available with a range of Human Machine Interfaces from Lamps, Switches, Dials and Meters* though to PC based SCADA Systems*, DCS systems* and the internet. Remote monitoring is available through an inbuilt HMI web server. The STIG can be monitored using any device that has a web browser. The TMC STIG can send emails and SMS text messages to inform operators of process critical events. Industrial wireless connections* minimise the time needed for instrument loop checks.

The TMC STIG can accommodate Auxiliary Control* and be combined with TMC ASCC Core Control Application Software to provide Integrated Train Control for a Steam Turbine Compressor Set*.

Zener Barriers*, Galvanic Isolators*, Interposing Relays* and Position Controllers* can be supplied in addition as required by the application.

Part Number	**Description**
0023-003	**STIG Steam Turbine Integrated Governor**
0022-003	**HMI-STIG 15" Panel Mounted Colour Touch Screen**

For enquiries and further information on STIG, ASCC or Gas Turbine Control please contact TMC Technical Sales by emailing techsales@turbomachinerycontrols.com.

*** Not included in 0022-003 or 0023-003.**