



## Reference list for GTM Standard Machines

### International projects

**INMETRO**  
**Instituto Nacional de Metrologia**  
**Normalização e Qualidade Industrial**  
Xerém - Rio de Janeiro  
Brasil

Force Standard Machine 110 kN/1100 kN  
Torque Standard Machine 3000 Nm

**INTI**  
**Instituto Nacional de Tecnologia Industrial**  
San Martin  
Argentina

Force Standard Machine 110 kN

**KIM LIPI**  
**National Institute**  
Jakarta  
Indonesia

Force Standard Machine 20kN  
Force Standard Machine 5000kN  
Torque Standard Machine 2000Nm

**NIMT**  
**National Institute of Metrology**  
Bangkok Thailand

Torque Standard Machine 1000Nm

**NIS**  
**National Institute for Standards**  
El-Haram El-Giza  
Egypt

Force Standard Machine 50 kN  
Force Standard Machine 500 kN  
Force Standard Machine 5000 kN

**NPL**  
**National Physical Laboratory**  
New Delhi  
India

Force Standard 100kN/ 1MN

**Sartorius**  
Beijing  
China

Mass Standard Machine 5t  
Mass Standard Machine 200t

**SPRING (PSB)**  
**National Metrology Centre**  
Singapore

Force Standard Machine 50kN /2MN



## Reference list for GTM Standard Machines

### European projects

#### **EAM (METAS)**

**Eidgenössisches Amt für Messwesen**

Wabern  
Switzerland

Force Standard Machine 200 N  
Force Standard Machine 5,5 kN  
Force Standard Machine 110 kN  
Torque Standard Machine 1000 Nm

#### **E.I.M.**

**Hellenic Institute of Metrology**

Thessaloniki  
Greece

Force Standard Machine 100 kN  
Force Standard Machine 1000 kN  
Force Standard Machine 5000 kN  
Force Standard Machine 100kN/ 1000 kN

#### **Force Technology**

Copenhagen  
Danmark

Force Standard Machine 100kN

#### **IPQ**

**Instituto Português da Qualidade**

Monte de Caparica  
Portugal

Force Standard Machine 5kN  
Force Standard Machine 100 kN/ 1MN

#### **Marmara Research Centre**

**National Metrology Institute**

Gebze-Kokaeli  
-Turkey-

Force Standard Machine 11 kN  
Force Standard Machine 110 kN/ 1100 kN

#### **Revere Transducers Europe**

Breda  
Nederlands

Mass Standard Machine 280 kg re-building  
Mass Standard Machine 2800 kg/  
60000 kg re-building

#### **Swedish National Testing and Research Institute**

Boras  
Sweden

Force Standard Machine 100 kN/1MN  
re-building

#### **TEDEA-Huntleigh Europe Limited**

Cardiff  
Great Britain

Mass Standard Machine 100.000 kg

#### **Tractel S.A.**

Romilly-sur-Seine  
France

Force Standard Machine 500 kN

#### **University Zagreb Croatia**

Force Standard Machine 500kN

## Reference list for GTM Standard Machines

### German projects

**BAM**  
**Bundesanstalt für Materialforschung  
und Prüfung**  
Berlin  
Germany

Force Standard Machine 550 N  
Force Standard Machine 2200 N

**Dr. Staiger Mohilo + Co GmbH**  
**Industrielle Messtechnik und Prüfsysteme**  
Lorch  
Germany

Torque Standard Machine 3000 Nm  
Torque Standard Machine 5000 Nm

**Fraunhofer-Institut für Betriebsfestigkeit  
(LBF)**  
Darmstadt  
Germany

Force Standard Machine 1,1 MN

**HBM - HOTTINGER BALDWIN  
MESSTECHNIK GmbH**  
Darmstadt  
Germany

Force Standard Machine 200 N  
Force Standard Machine 1000kn re-building  
Force Standard Machine 5000kN  
Torque Standard Machine 25000 Nm

**MPA**  
Dortmund  
Germany

Force Standard Machine 25kN

**PTB**  
**Physikalisch-Technische Bundesanstalt**  
Braunschweig  
Germany

Force Standard Machine 100 N  
Force Standard Machine 200 N  
Force Standard Machine 2 kN  
Force Standard Machine 20 kN  
Force Standard Machine 100 kN  
Force Standard Machine 1 MN re-building  
Force Standard Machine 2 MN re-building  
Weighing system 300 kg  
Weighing system 3000 kg  
Weighing system 30000 kg  
Torque Standard Machine 1,1 MNm

**Siemens AG**  
Fürth  
Germany

Mass Standard Machine 280 kg  
Mass Standard Machine 2800 kg/ 60000 kg

**Staatliche Materialprüfungsanstalt**  
Darmstadt  
Germany

Force Standard Machine 110N  
Force Standard Machine 550N  
Force Standard Machine 5,5 kN