

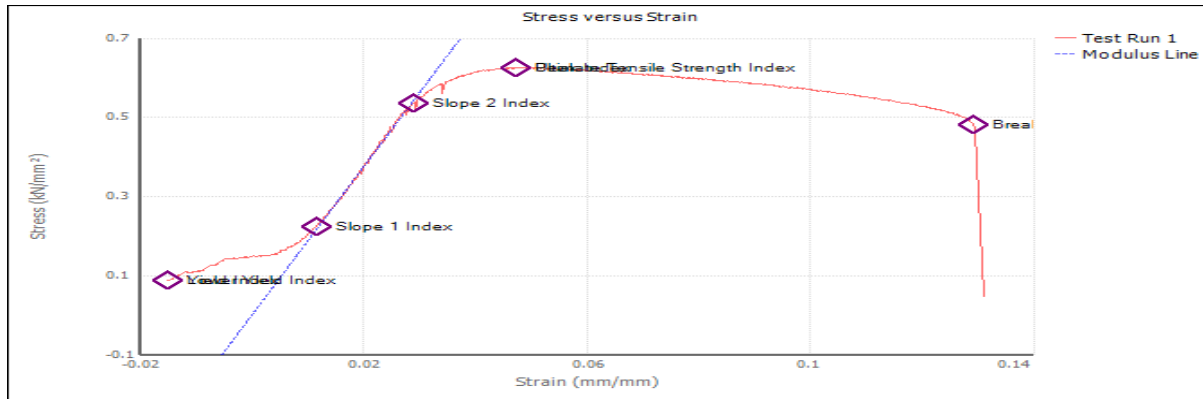
Mechanical Test of Steel Products

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM A370	Report No.	8453-01
Work Order No.	8453	Lab No. (ST)	845301

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	22
			RH %	55

Material Description	M19X90 SHEAR STUD WITH CERAMIC FERRULE	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Sample No. →	ST-845301	
Brand and Marking	-	M19X90
Stress Area	mm ²	157
Load, Ultimate (Failure Tension Load)	Kn	98.39
Yield	Kn	80.48
	Mpa	512.66
Stress, Ultimate (Tensile Strength)	Mpa	626.59
Type of Failure	FRACTURE	



Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
---------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----x-----x end of test report x-----x-----



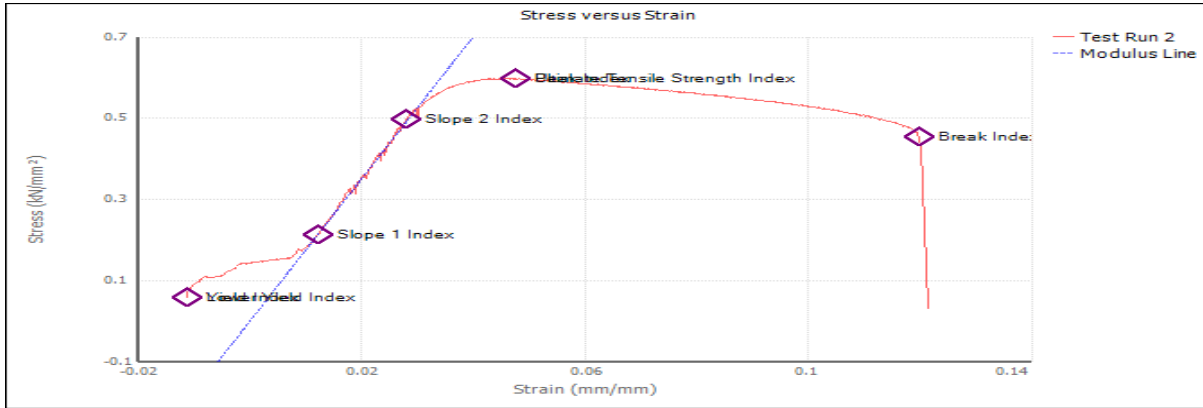
Mechanical Test of Steel Products

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM A370	Report No.	8453-02
Work Order No.	8453	Lab No. (ST)	845302

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	22
			RH %	55

Material Description	M19X106 SHEAR STUD WITH CERAMIC FERRULE	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Sample No. →		ST-845302
Brand and Marking	-	M19X106
Stress Area	mm²	157
Load, Ultimate (Failure Tension Load)	Kn	93.99
Yield	Kn	77.91
	Mpa	496.22
Stress, Ultimate (Tensile Strength)	Mpa	598.57
Type of Failure		FRACTURE



Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
---------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----x-----x end of test report x-----x-----



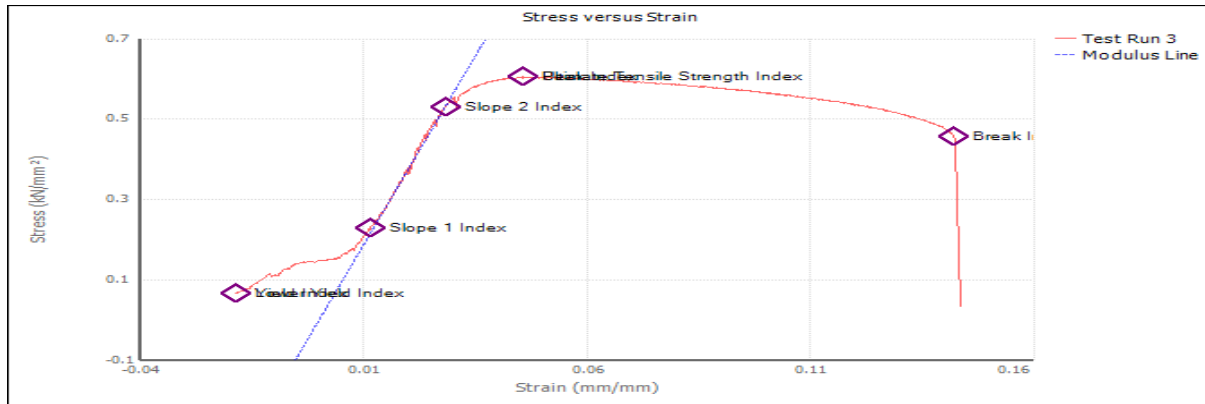
Mechanical Test of Steel Products

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM A370	Report No.	8453-03
Work Order No.	8453	Lab No. (ST)	845303

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	22
			RH %	55

Material Description	M19X100 SHEAR STUD WITH CERAMIC FERRULE	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Sample No. →		ST-845303
Brand and Marking	-	M19X100
Stress Area	mm ²	157.0
Load, Ultimate (Failure Tension Load)	kN	95.02
Yield	kN	80.44
	MPa	512.33
Stress, Ultimate (Tensile Strength)	MPa	605.13
Type of Failure		FRACTURE



Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
---------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.
-----X-----X end of test report X-----X-----



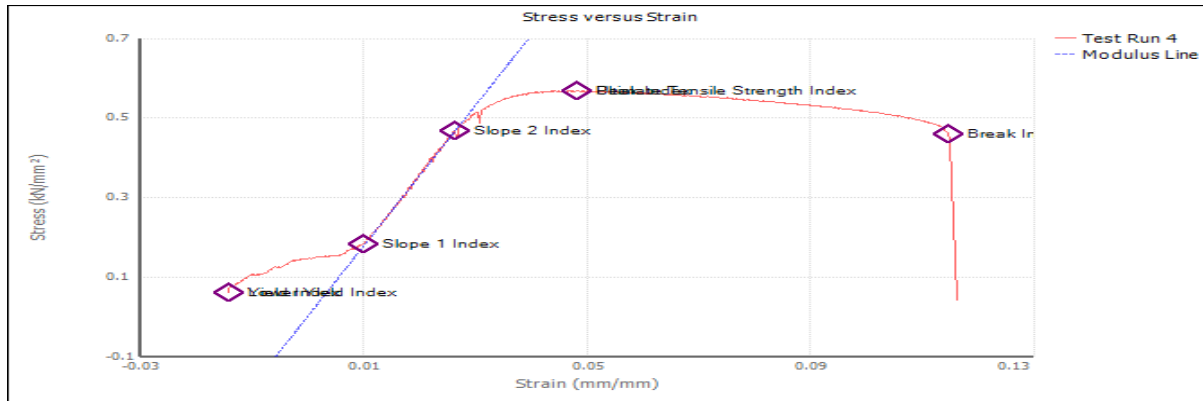
Mechanical Test of Steel Products

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM A370	Report No.	8453-04
Work Order No.	8453	Lab No. (ST)	845304

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	22
			RH %	55

Material Description	M19X120 SHEAR STUD WITH CERAMIC FERRULE	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Sample No. →		ST-845304
Brand and Marking	-	M19X120
Stress Area	mm ²	157
Load, Ultimate (Failure Tension Load)	Kn	89.30
Yield	Kn	76.84
	Mpa	489.42
Stress, Ultimate (Tensile Strength)	Mpa	568.79
Type of Failure		FRACTURE



Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
---------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----X-----x end of test report x-----X-----



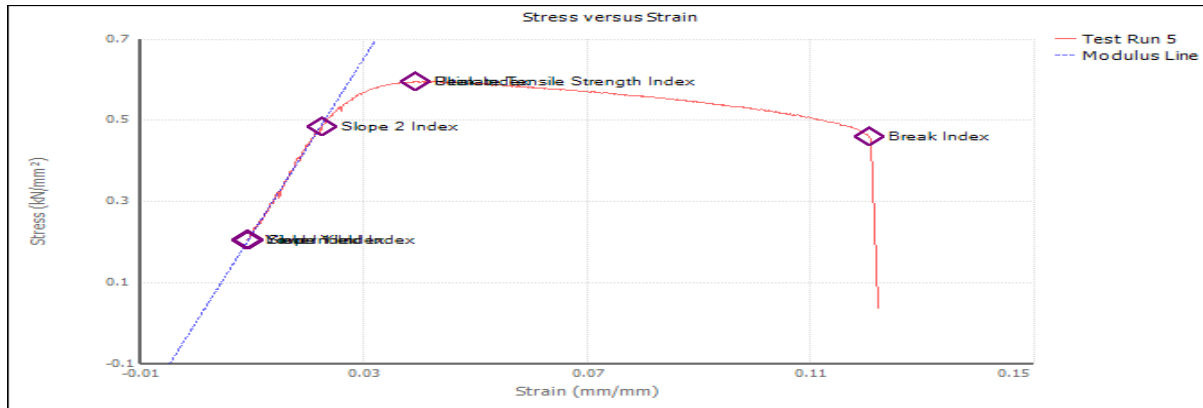
Mechanical Test of Steel Products

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM A370	Report No.	8453-05
Work Order No.	8453	Lab No. (ST)	845305

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	22
			RH %	55

Material Description	M19X210 SHEAR STUD WITH CERAMIC FERRULE	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Sample No. →	ST-845305	
Brand and Marking	-	M19X210
Stress Area	mm ²	157
Load, Ultimate (Failure Tension Load)	Kn	93.71
Yield	Kn	75.71
	Mpa	482.26
Stress, Ultimate (Tensile Strength)	Mpa	596.80
Type of Failure	FRACTURE	



Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
---------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----x-----x end of test report x-----x-----



**Report of Chemical Analysis of Carbon Steel, Low-Alloy Steel Using Spectrolab Machine
ASTM E415**

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM E415	Report No.	8453-06
Work Order No.	8453	Lab No. (ST)	845306

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	23
			RH %	55

Sample Description: -

Material Description	SHEAR STUD WITH CERAMIC FERRULE M19X210	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Name of Elements	Symbol	Test Result (% Average)	Name of Elements	Symbol	Test Result (% Average)
Carbon	C	0.165	Tungsten	W	<0.00020
Silicon	Si	0.0307	Lead	Pb	<0.00020
Manganese	Mn	0.567	Tin	Sn	0.0029
Phosphorus	P	0.0157	Arsenic	As	-
Sulfur	S	0.0042	Calcium	Ca	0.00077
Chromium	Cr	0.0147	Antimony	Sb	<0.00040
Molybdenum	Mo	<0.0003	Boron	B	0.00027
Nickel	Ni	0.0027	Nitrogen	N	0.0267
Aluminium	Al	0.0710	Iron	Fe	99.0
Copper	Cu	0.0064	Cobalt	Co	0.0040
Niobium	Nb	0.00041	Vanadium	V	0.0013
Titanium	Ti	0.0015	Oxygen	O	<0.0020

Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
----------------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----x-----x end of test report x-----x-----



**Report of Chemical Analysis of Carbon Steel, Low-Alloy Steel Using Spectrolab Machine
ASTM E415**

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM E415	Report No.	8453-07
Work Order No.	8453	Lab No. (ST)	845307

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	23
			RH %	55

Sample Description: -

Material Description	SHEAR STUD WITH CERAMIC FERRULE M19X120	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Name of Elements	Symbol	Test Result (% Average)	Name of Elements	Symbol	Test Result (% Average)
Carbon	C	0.155	Tungsten	W	<0.00020
Silicon	Si	0.0315	Lead	Pb	<0.00020
Manganese	Mn	0.660	Tin	Sn	0.0029
Phosphorus	P	0.0167	Arsenic	As	-
Sulfur	S	0.0030	Calcium	Ca	0.00058
Chromium	Cr	0.0143	Antimony	Sb	<0.00040
Molybdenum	Mo	<0.00003	Boron	B	0.00018
Nickel	Ni	0.0025	Nitrogen	N	0.0273
Aluminium	Al	0.0341	Iron	Fe	99.0
Copper	Cu	0.0058	Cobalt	Co	0.0035
Niobium	Nb	0.00078	Vanadium	V	0.0011
Titanium	Ti	0.0012	Oxygen	O	<0.0020

Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
----------------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----X-----x end of test report x-----X-----



**Report of Chemical Analysis of Carbon Steel, Low-Alloy Steel Using Spectrolab Machine
ASTM E415**

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM E415	Report No.	8453-08
Work Order No.	8453	Lab No. (ST)	845308

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	23
			RH %	55

Sample Description: -

Material Description	SHEAR STUD WITH CERAMIC FERRULE M19X100	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Name of Elements	Symbol	Test Result (% Average)	Name of Elements	Symbol	Test Result (% Average)
Carbon	C	0.159	Tungsten	W	<0.00020
Silicon	Si	0.0258	Lead	Pb	<0.00020
Manganese	Mn	0.652	Tin	Sn	0.0022
Phosphorus	P	0.0153	Arsenic	As	-
Sulfur	S	0.0040	Calcium	Ca	0.00091
Chromium	Cr	0.0137	Antimony	Sb	<0.00040
Molybdenum	Mo	<0.00003	Boron	B	0.00020
Nickel	Ni	0.0024	Nitrogen	N	0.0262
Aluminium	Al	0.0294	Iron	Fe	99.1
Copper	Cu	0.0044	Cobalt	Co	0.0038
Niobium	Nb	0.00063	Vanadium	V	0.0010
Titanium	Ti	0.0012	Oxygen	O	<0.0020

Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
----------------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----X-----x end of test report x-----X-----



**Report of Chemical Analysis of Carbon Steel, Low-Alloy Steel Using Spectrolab Machine
ASTM E415**

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM E415	Report No.	8453-09
Work Order No.	8453	Lab No. (ST)	845309

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	23
			RH %	55

Sample Description: -

Material Description	SHEAR STUD WITH CERAMIC FERRULE M19X106	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Name of Elements	Symbol	Test Result (% Average)	Name of Elements	Symbol	Test Result (% Average)
Carbon	C	0.161	Tungsten	W	<0.00020
Silicon	Si	0.0233	Lead	Pb	<0.00020
Manganese	Mn	0.606	Tin	Sn	<0.00010
Phosphorus	P	0.0173	Arsenic	As	-
Sulfur	S	0.0033	Calcium	Ca	0.0010
Chromium	Cr	0.0017	Antimony	Sb	<0.00040
Molybdenum	Mo	<0.0003	Boron	B	0.00019
Nickel	Ni	0.0010	Nitrogen	N	>0.0350
Aluminium	Al	0.0262	Iron	Fe	99.1
Copper	Cu	0.0057	Cobalt	Co	0.0024
Niobium	Nb	0.00036	Vanadium	V	0.0013
Titanium	Ti	0.00085	Oxygen	O	<0.0020

Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
----------------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----X-----x end of test report x-----X-----



**Report of Chemical Analysis of Carbon Steel, Low-Alloy Steel Using Spectrolab Machine
ASTM E415**

Client	SMART SKILL COMPANY	Date Received	13-05-2025
Project	QUALITY TEST	Date Tested	13-05-2025
Location	JEDDAH	Report Date	15-05-2025
Test Method	ASTM E415	Report No.	8453-10
Work Order No.	8453	Lab No. (ST)	845310

Sample Condition	SATISFACTORY	Environment of Test	Temp. °C	23
			RH %	55

Sample Description: -

Material Description	SHEAR STUD WITH CERAMIC FERRULE M19X90	Sampling Date	13-05-2025
Brand/Source	OEM	Grade	N/G
Supplier	SMART SKILL COMPANY	Batch/Packing No.	N/G

Name of Elements	Symbol	Test Result (% Average)	Name of Elements	Symbol	Test Result (% Average)
Carbon	C	0.167	Tungsten	W	<0.00020
Silicon	Si	0.0266	Lead	Pb	<0.00020
Manganese	Mn	0.706	Tin	Sn	<0.00010
Phosphorus	P	0.0190	Arsenic	As	-
Sulfur	S	0.0074	Calcium	Ca	0.00068
Chromium	Cr	0.0152	Antimony	Sb	<0.00040
Molybdenum	Mo	0.00034	Boron	B	0.00016
Nickel	Ni	0.0019	Nitrogen	N	>0.0350
Aluminium	Al	0.0349	Iron	Fe	99.0
Copper	Cu	0.0070	Cobalt	Co	0.0034
Niobium	Nb	0.00054	Vanadium	V	0.0013
Titanium	Ti	0.00097	Oxygen	O	<0.0020

Remarks	THE SAMPLE CONFORMS TO STANDARD SPECIFICATIONS.
----------------	---

Results relate only to the sample as received from the Customer
MTL is not responsible for samples after 15 days of the test date
The test report shall NOT be reproduced without approval from the MTL management
The laboratory follows simple acceptance with a zero guard band as per ILAC G8.

-----X-----x end of test report x-----X-----

