

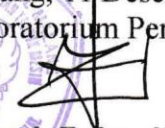


INSTITUT TEKNOLOGI NASIONAL MALANG
FAKULTAS TEKNOLOGI INDUSTRI JURUSAN TEKNIK MESIN
LABORATORIUM PENGUJIAN MATERIAL
Jl. Raya Karanglo Km. 2 Telp. (0341) 417636 Ext. 511 Malang

Nama : I Putu Widi Satya Putra Arisudana
NIM/ : 1811925
Jurusan : Teknik Mesin S1
Hari / Tanggal : Kamis / 11 Desember 2019
Specimen : Komposit Serat Karbon, Rami , Kapas dan Karet

TEST REPORT PENGUJIAN TARIK

No	Variasi Prosentase Karet	Jumlah Speciment	Area Mm ²	Max Force Kgf	0.2 % Y.S Kgf/mm ²	Tensile Straing Kgf/mm ²	Elongition (%)
1	30 %	1	231	2260	4.13	9.78	20
		2	231	2380	4.41	10.34	20
		3	231	1936	3.76	8.38	25
2	40 %	1	231	1597	2.59	6.91	21
		2	231	2235	4.11	9.67	21
		3	231	2003	3.69	8.67	24
3	50 %	1	231	2238	4.03	9.69	24
		2	231	2327	4.49	10.07	19
		3	231	1648	2.98	7.14	21

Malang, 11 Desember 2019
Kepala Laboratorium Pengujian Material

Ir. Teguh Rahardjo, MT
NIP. 195706011992021001



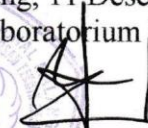
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LABORATORIUM PENGUJIAN MATERIAL

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DATA PENGUJIAN IMPAK

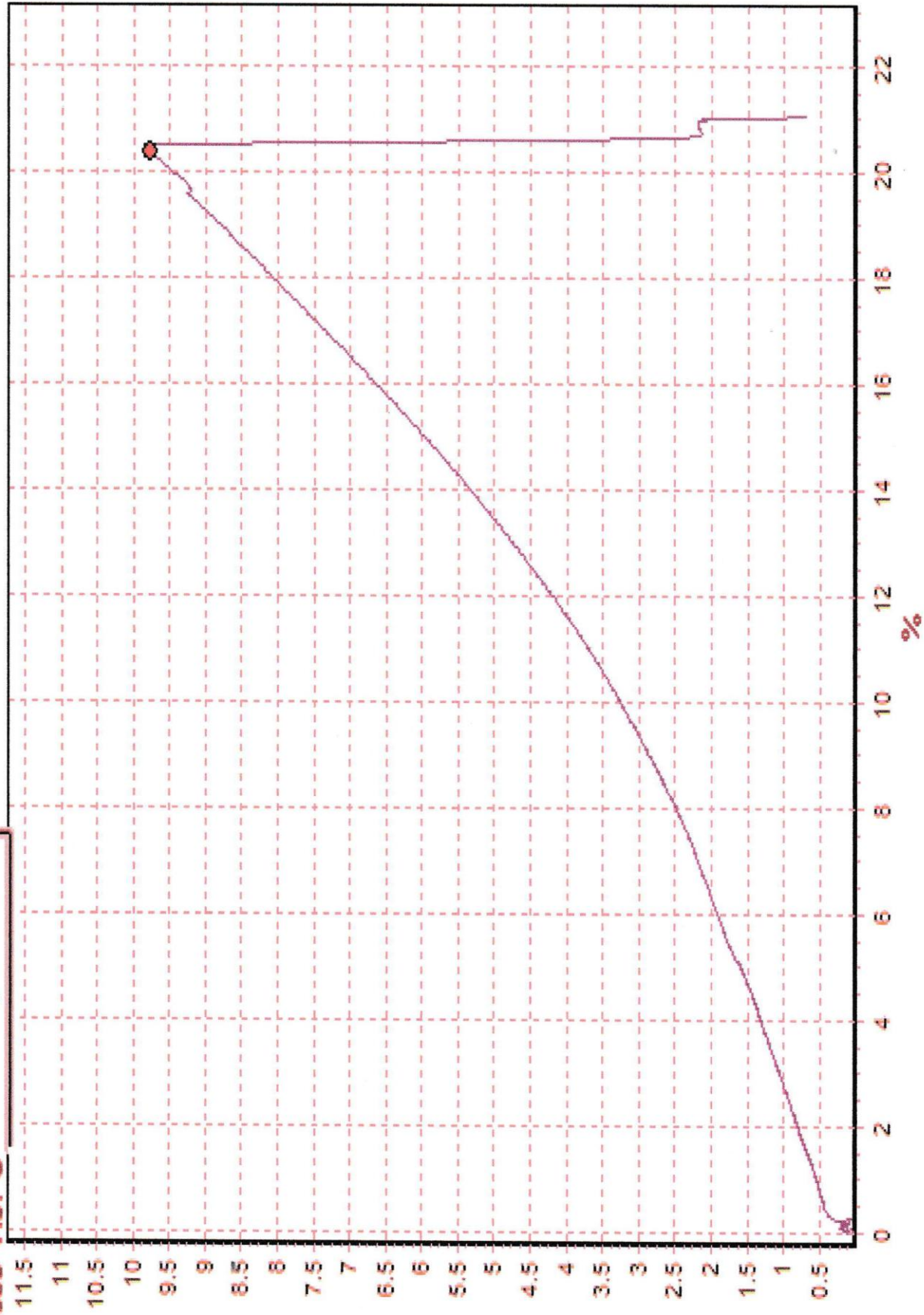
Nama : I Putu Widi Satya Putra Arisudana
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Specimen : Komposit Serat Karbon, Rami , Kapas dan Karet

Variasi Prosentase Karet	Jumlah Sample	l (mm)	b (mm)	t (mm)	h (mm)	Luas (mm ²)	α (°)	β (°)	Energi (Joule)	HI (Joule/mm)
30 %	1	55	10	10	8	80	45	36	1,7354	0,0217
	2	55	10	10	8	80	45	37	1,5586	0,0195
	3	55	10	10	8	80	45	35	1,9080	0,0239
40 %	1	55	10	10	8	80	45	36	1,7354	0,0217
	2	55	10	10	8	80	45	37	1,5586	0,0195
	3	55	10	10	8	80	45	37	1,5586	0,0195
50 %	1	55	10	10	8	80	45	27	3,1316	0,0391
	2	55	10	10	8	80	45	37	1,5586	0,0195
	3	55	10	10	8	80	45	38	1,3777	0,0172

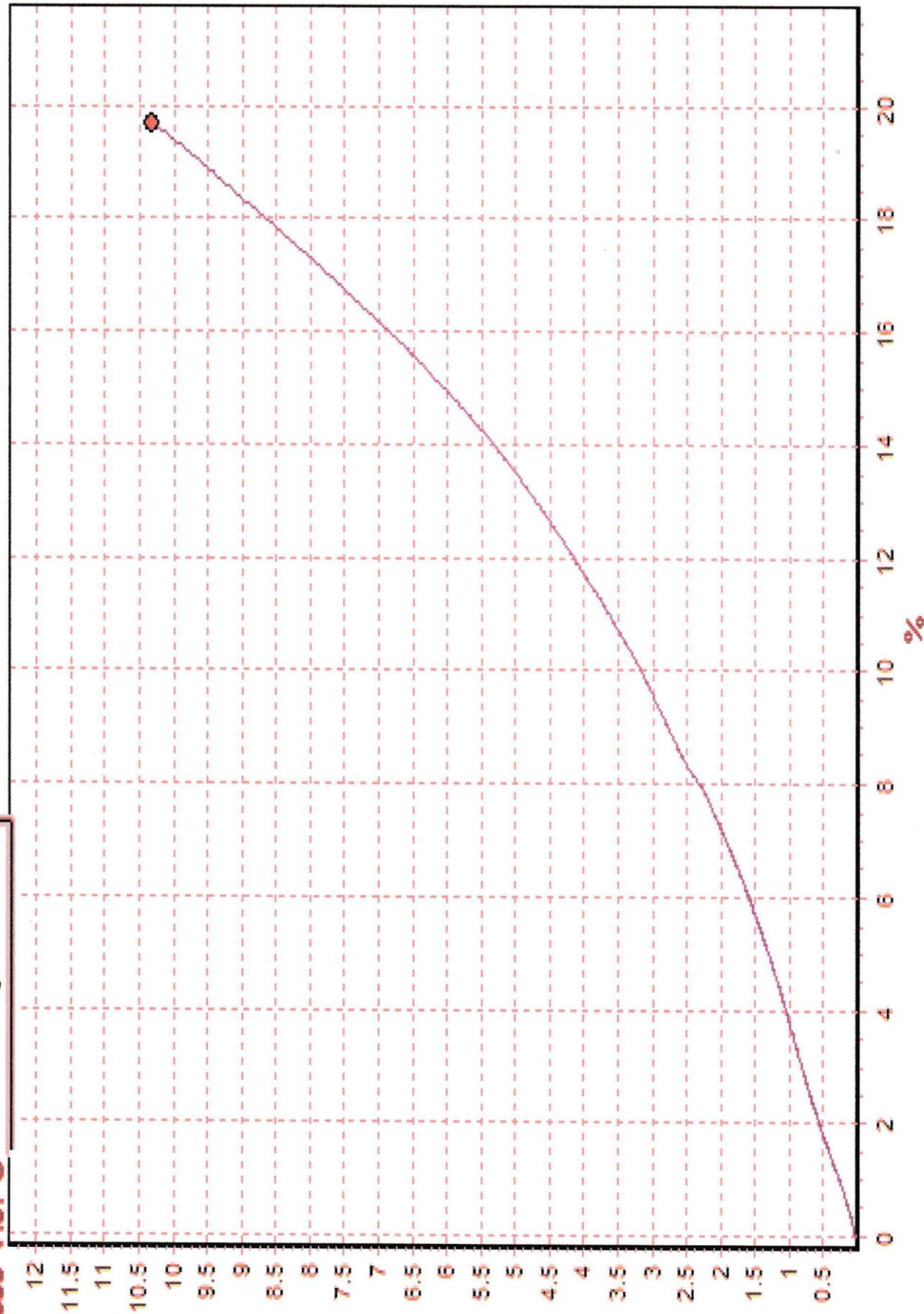
Malang, 11 Desember 2019
Kepala Laboratorium Uji Material

Ir. Teguh Rahardjo, MT
NIP. 195706011992021001

30% A

Stress v.s. S • 9.785 kgf/mm² T.S.



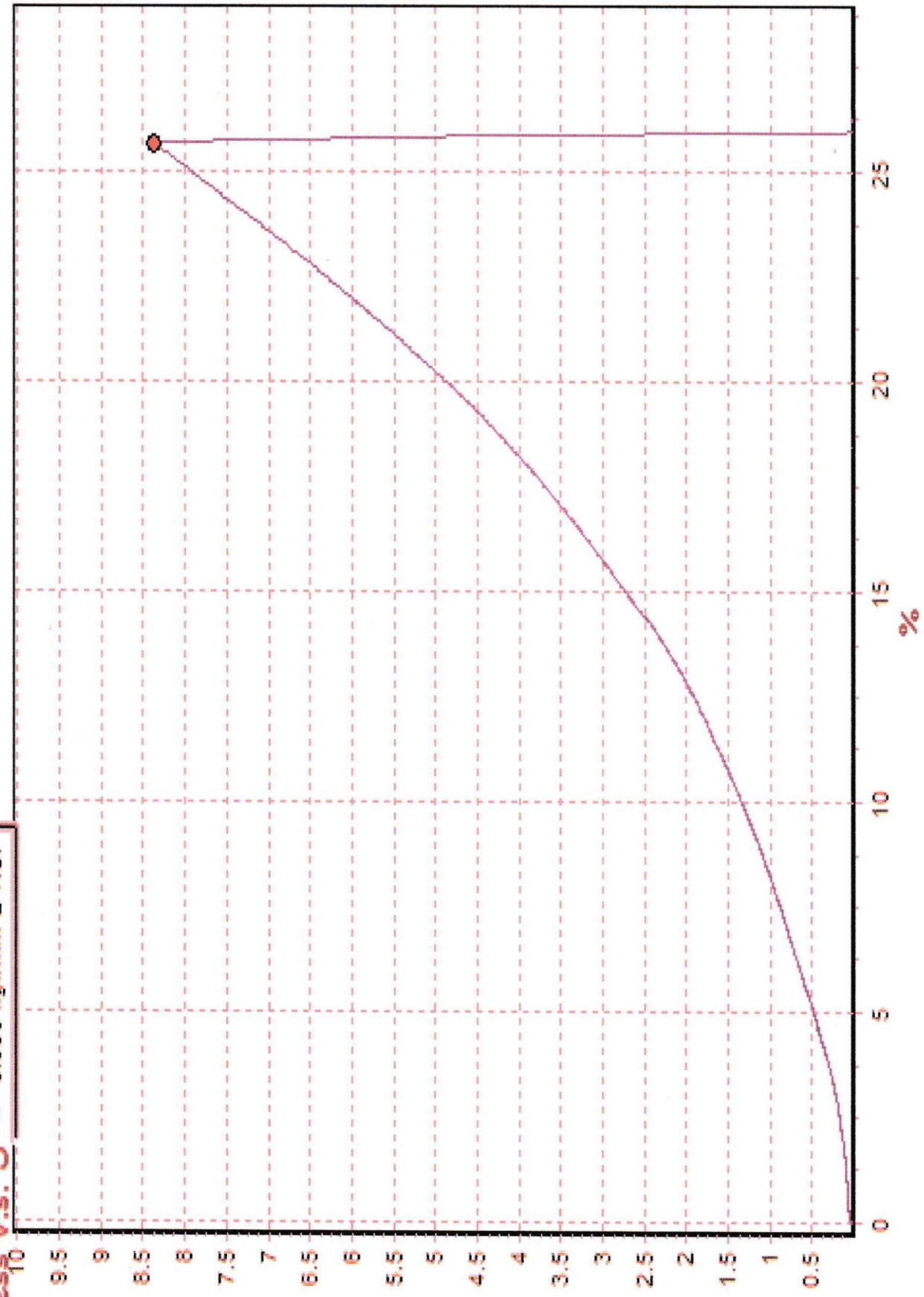
301-023

Stress v.s. S • 10.337 kgf/mm² T.S.

301-024

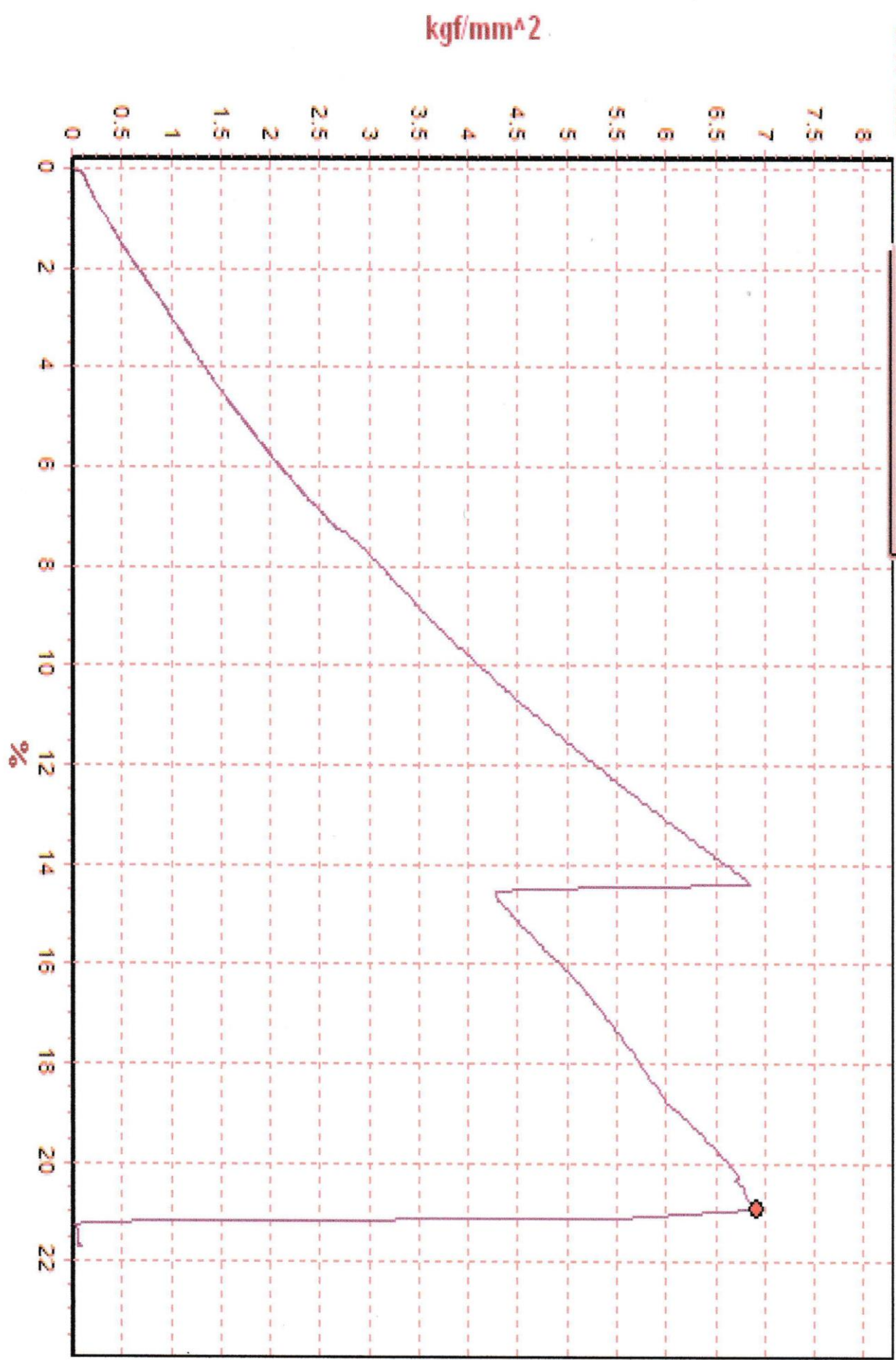
30 % C

Stress v.s. S • 8.380 kgf/mm² T.S.



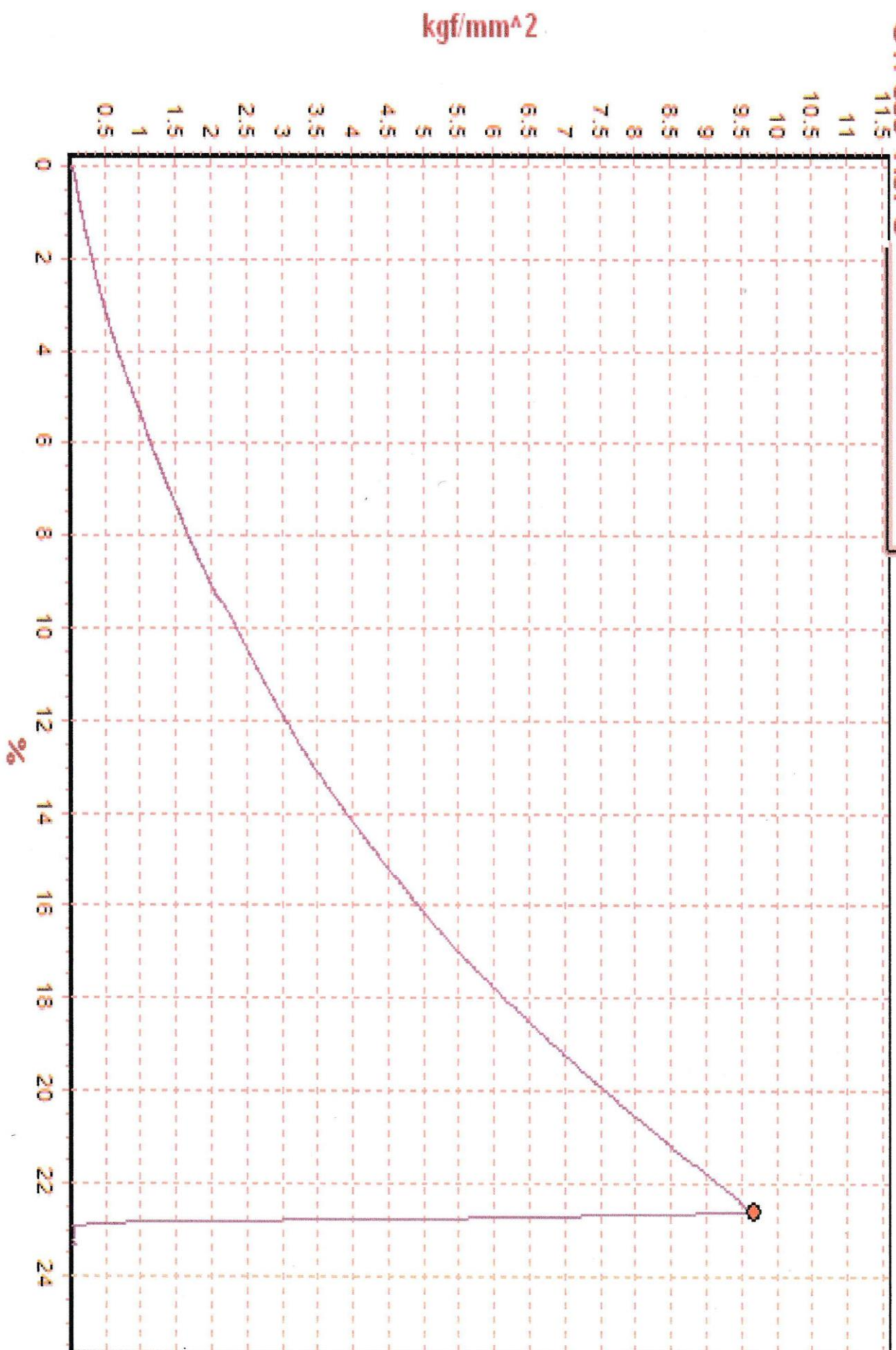
301-025

Stress v.s. S • 6.915 kg/mm² T.S.



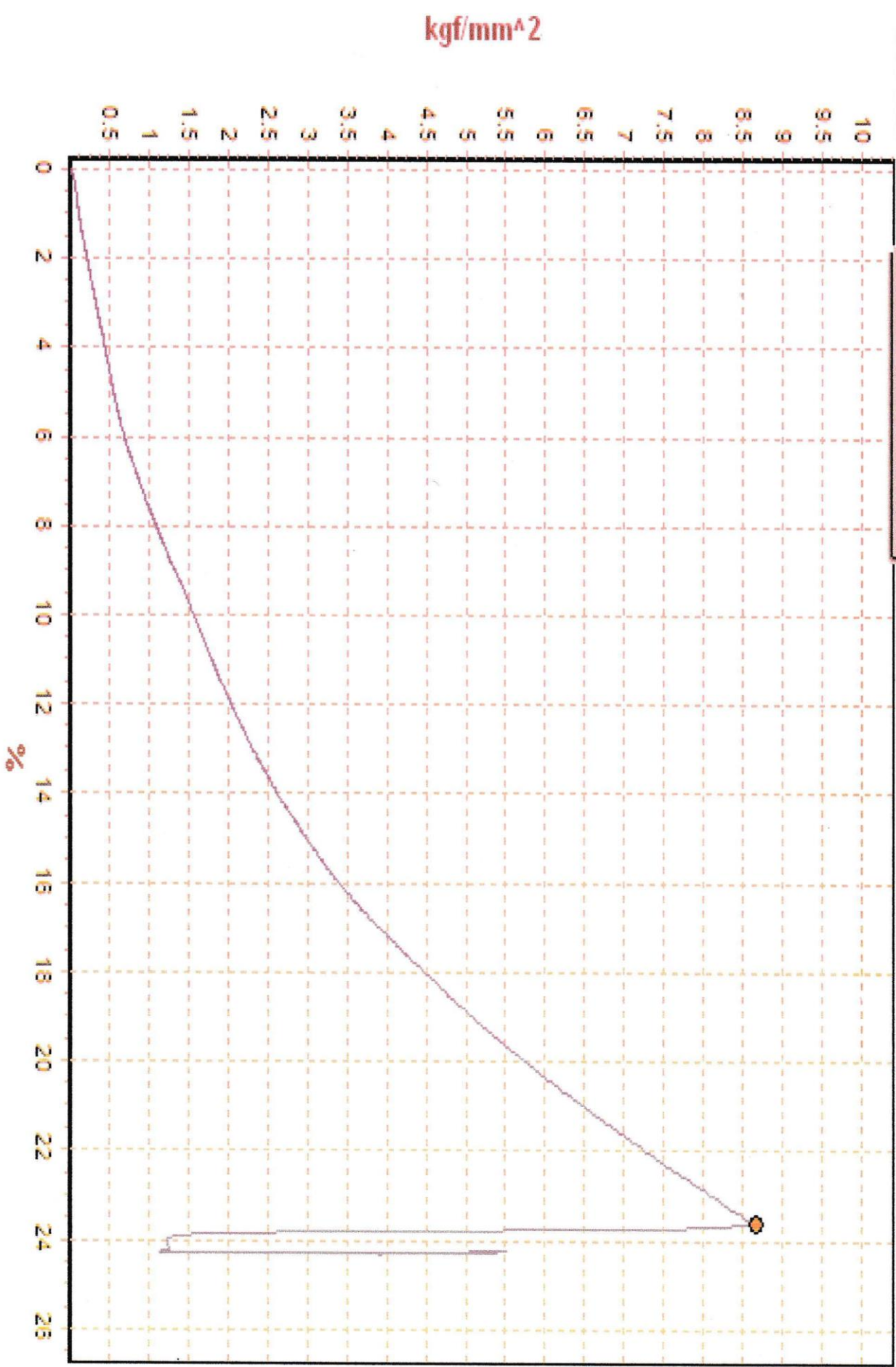
301-026

Stress v.s. ϵ • 9.674 kgf/mm² T.S.

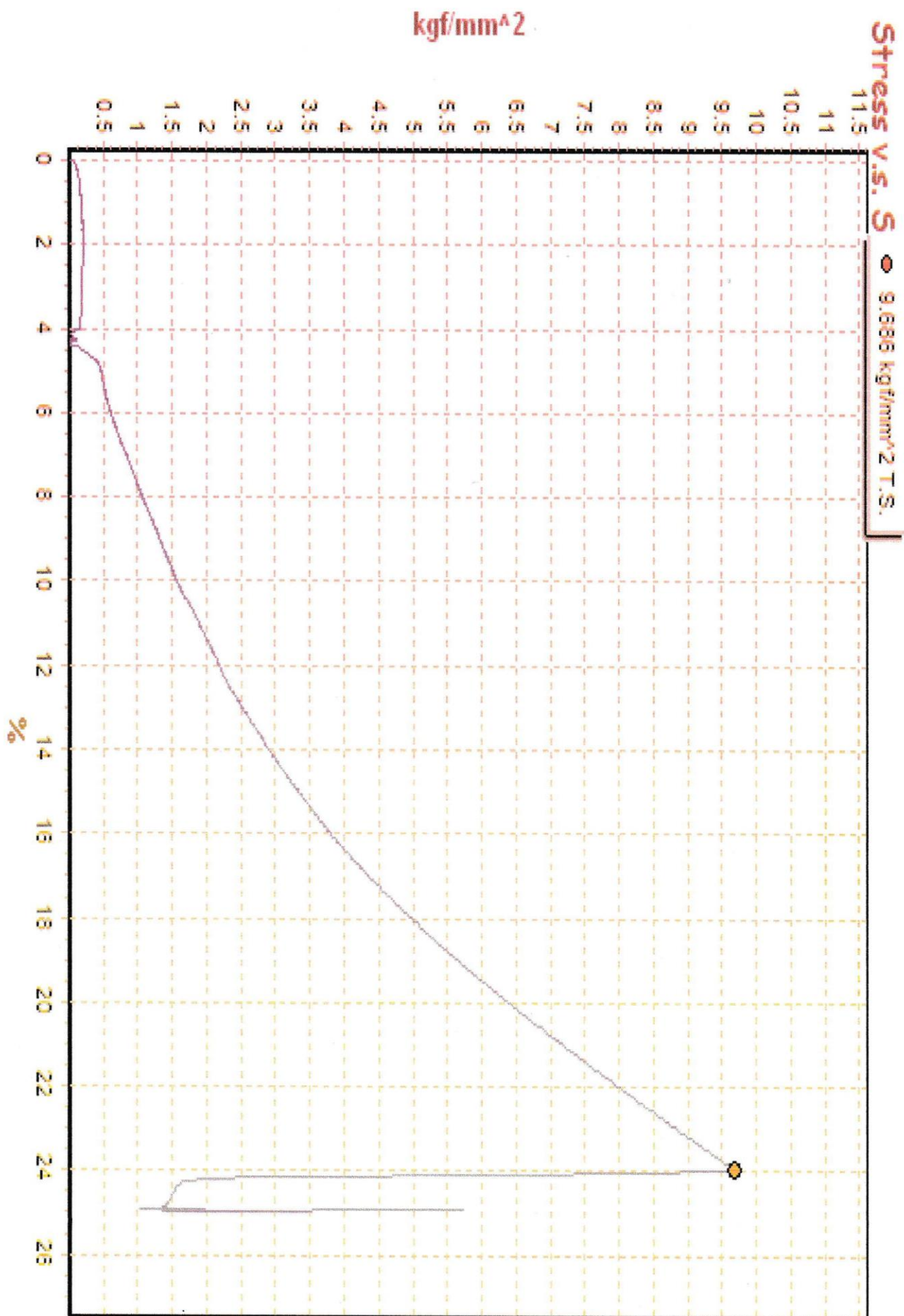


301-027

Stress v.s. S ● 8.671 kgf/mm² T.S.

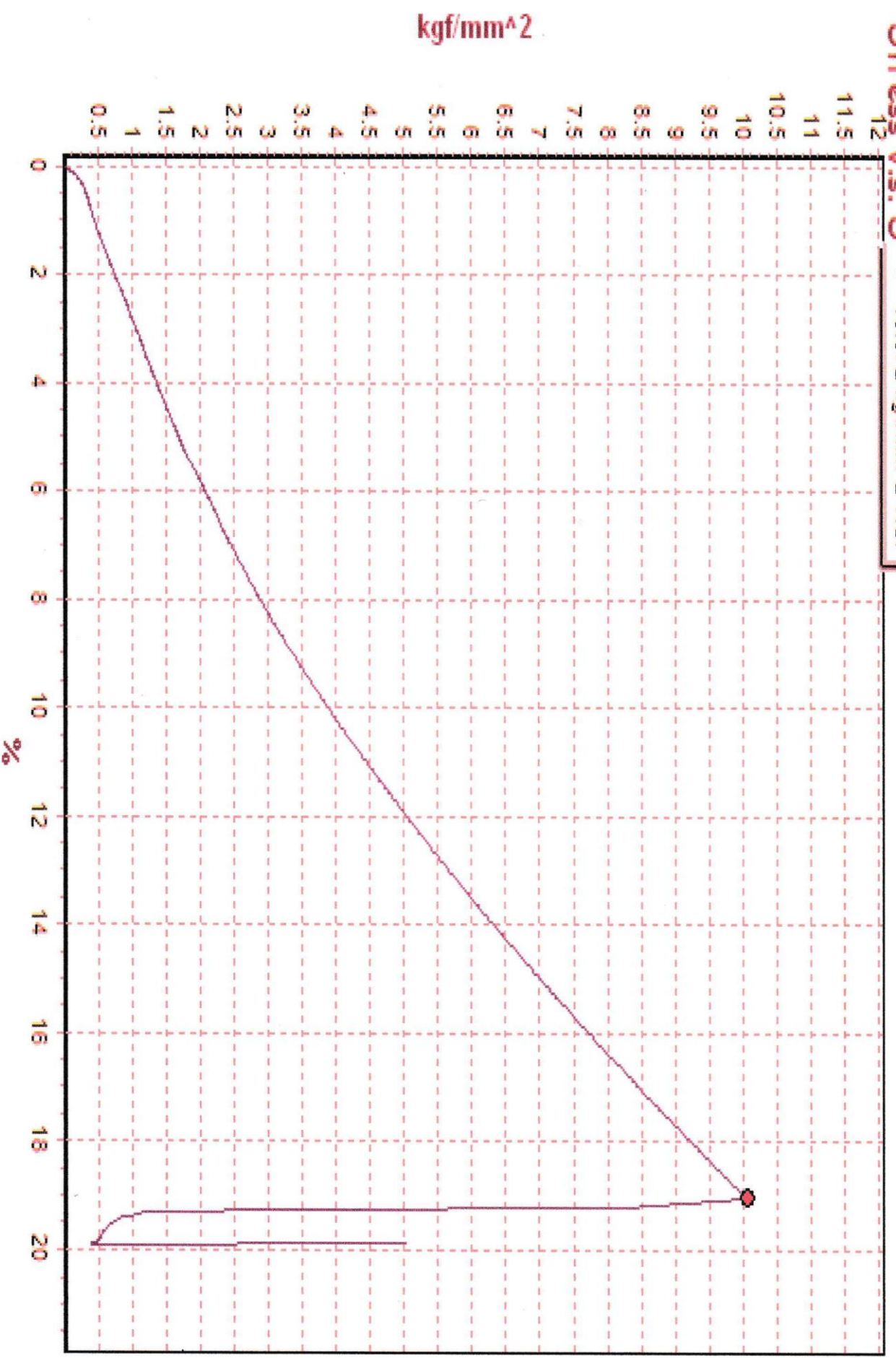


301-028

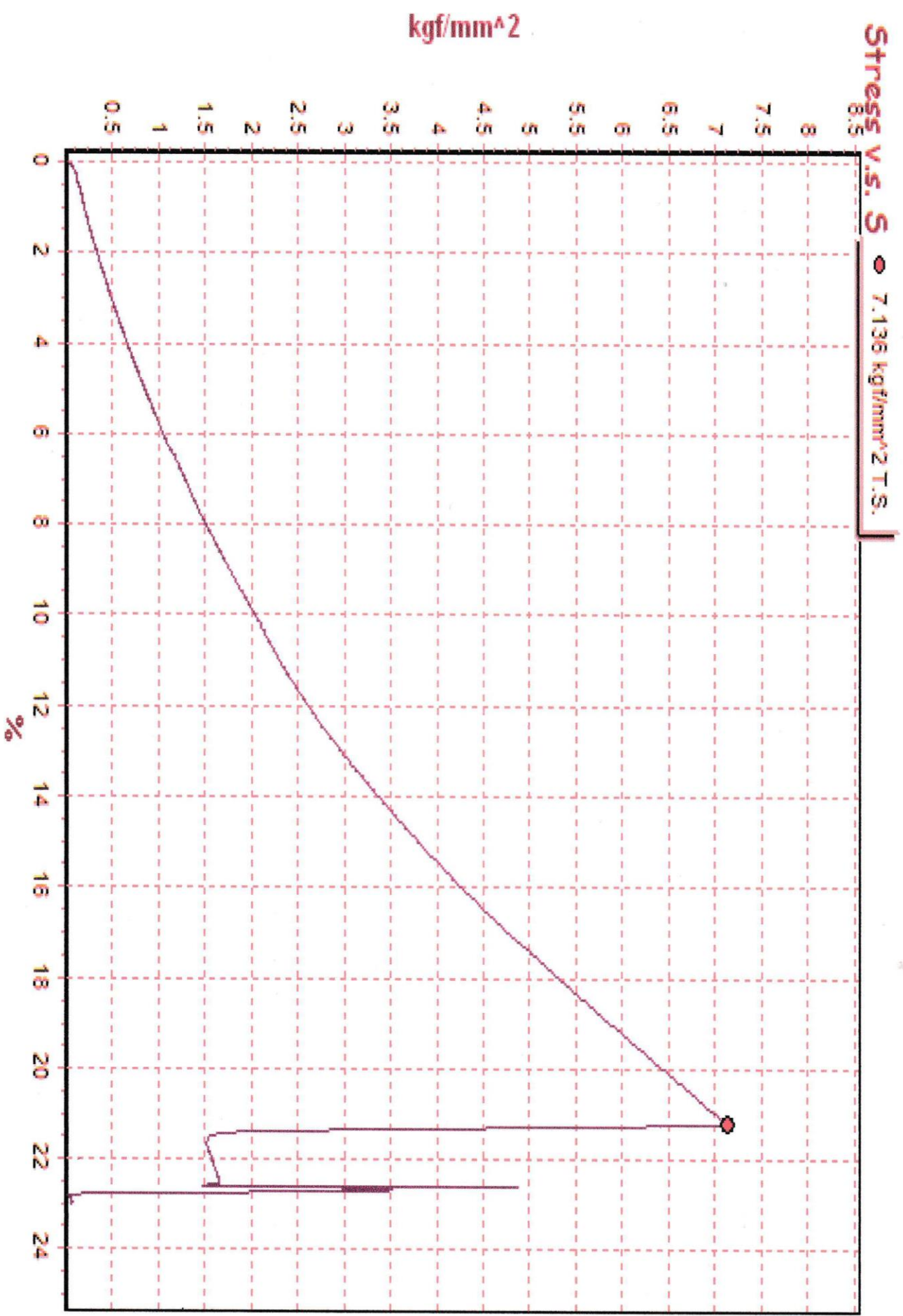


301-029

Stress v.s. S ● 10.072 kgf/mm² T.S.



301-030



301-031