
	DoP-DECLARATION OF PERFORMANCE No.: 01 (according to regulation EU No. 305/2011)	 2028
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1. Unique identification code of the product-type:

**Hot rolled round bars on following steel grades according to EN 10027-1 and EN 10027-2:
S235JR/1.0038 ; S235J0/1.0114 ; S235J2/1.0117 ; S275JR/1.0044 ; S275J0/1.0143
S275J2/1.0145 ; S355JR/1.0045 ; S355J0/1.0553 ; S355J2/1.0577 ; S355K2/1.0596**

2. Intended use of the construction product, in accordance with the applicable harmonised technical specification: **EN 10025-1:2004.**

Non-alloy structural steel used for general mechanical engineering in construction structures.

3. Name and contact address of the manufacturer:

**DONALAM S.R.L. Prelungirea Bucuresti Nr. 246R
910125 Calarasi Romania**

4. System of assessment and verification of constancy of performance of the construction product:

2+

5. Name and identification number of the notified body:

**No.-2028-RINA SIMTEX-OC Bucuresti,
Str. Leonte Anastasievici, Nr. 4D, sector 5, Romania**

6. Reference number of evaluation report and of certificate of conformity:

**Report code: 23 SX 159 PC dated 2023-05-15.
Certificate of conformity of the factory production control 2028-CPR-638-2023**

7. Declared performance:

Essential characteristics	Requirement clauses in European Standards	Performance	Harmonised technical specification
Tolerances on dimension and shapes	7.7.1	EN 10060:2003	EN 10025-2:2019
Elongation	7.3.1	Annex 1	
Tensile strength	7.3.1		
Yield strength	7.3.1		
Impact test	7.3.1 + 7.3.2	Annex 2	
Chemical analysis	7.2.1		
Weldability (Chemical composition)	7.2 + 7.4.1	NPD	
Durability (Chemical composition)	7.2 + 7.4.3	NPD	

8. Performance of the product identified in point 1 is in conformity with the declared performance in point 7

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.

Signed on behalf of DONALAM S.R.L.
Calarasi, 26.04.2023

Quality Manager





DONALAM
AFV BELTRAME GROUP

DoP-DECLARATION OF PERFORMANCE

No.: 01(according to regulation EU No. 305/2011)





2028

Annex 1 - Essential characteristics - Mechanical properties

Mechanical properties-Tensile test at ambient temperature										
Designation		Minimum yield strength ReH N/mm2					Minimum tensile strength Rm N/mm2			
		Nominal thickness mm					Nominal thickness mm			
		> 80 ≤ 100	> 100 ≤ 150	> 150 ≤ 200	> 200 ≤ 250	> 250 ≤ 400	> 3 ≤ 100	> 100 ≤ 150	> 150 ≤ 250	> 250 ≤ 400
EN 10027-1	EN 10027-2									
S235JR	1,0038									
S235J0	1,0114	215	195	185	175	165	360 to 510	350 to 500	340 to 490	330 to 480
S235J2	1,0117									
S275JR	1,0044									
S275J0	1,0143	235	225	215	205	195	410 to 560	400 to 540	380 to 540	380 to 540
S275J2	1,0145									
S335JR	1,0045									
S335J0	1,0553	315	295	285	275	265	470 to 630	450 to 600	450 to 600	450 to 600
S335J2	1,0577									
S335K2	1,0596									

Mechanical properties-Tensile test at ambient temperature						
Designation		Orientation of test pieces	Minimum percentage elongation after fracture A% Lo=5,65VSo			
			Nominal thickness mm		Nominal thickness mm	
			> 63 ≤ 100	> 100 ≤ 150	> 150 ≤ 250	> 250 ≤ 400
EN 10027-1	EN 10027-2					
S235JR	1,0038	I	24	22	21	21
S235J0	1,0114					
S235J2	1,0117					
S275JR	1,0044	I	21	19	18	18
S275J0	1,0143					
S275J2	1,0145					
S335JR	1,0045	I	20	18	17	17
S335J0	1,0553					
S335J2	1,0577					
S335K2	1,0596					



Mechanical properties-Impact test on longitudinal test pieces					
Designation		Temperature °C	Minimum energy KV2 in J		
			Nominal thickness mm		
			≤ 150	> 150 ≤ 250	> 250 ≤ 400
EN 10027-1	EN 10027-2				
S235JR	1,0038	20	27	27	27
S235J0	1,0114	0	27	27	27
S235J2	1,0117	- 20	27	27	27
	1,0044	20	27	27	27
S275J0	1,0143	0	27	27	27
S275J2	1,0145	- 20	27	27	27
S335JR	1,0045	20	27	27	27
S335J0	1,0553	0	27	27	27
S335J2	1,0577	- 20	27	27	27
S335K2	1,0596	- 20	40	33	33

	DoP-DECLARATION OF PERFORMANCE No.: 01 (according to regulation EU No. 305/2011)	 2028
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Annex 2 - Essential characteristics - Chemical composition

Chemical composition of the heat analysis											
Designation		C % max	Si % max	Mn % max	P % max	S % max	N % max	Cu % max	Ni % max	Cr % max	Mo % max
EN 10027-1	EN 10027-2										
S235JR	1,0038	0,20	-	1,40	0,035	0,035	0,012	0,55	0,42	0,29	0,11
S235J0	1,0114	0,17	-	1,40	0,030	0,030	0,012	0,55	0,42	0,29	0,11
S235J2	1,0117	0,17	-	1,40	0,025	0,025	-	0,55	0,42	0,29	0,11
S275JR	1,0044	0,22	-	1,50	0,035	0,035	0,012	0,55	0,42	0,29	0,11
S275J0	1,0143	0,18	-	1,50	0,030	0,030	0,012	0,55	0,42	0,29	0,11
S275J2	1,0145	0,18	-	1,50	0,025	0,025	-	0,55	0,42	0,29	0,11
S335JR	1,0045	0,24	0,55	1,60	0,035	0,035	0,012	0,55	0,42	0,29	0,11
S335J0	1,0553	0,22	0,55	1,60	0,030	0,030	0,012	0,55	0,42	0,29	0,11
S335J2	1,0577	0,22	0,55	1,60	0,025	0,025	-	0,55	0,42	0,29	0,11
S335K2	1,0596	0,22	0,55	1,60	0,025	0,025	-	0,55	0,42	0,29	0,11

Maximum CEV based on heat analysis				
Designation		Maximum CEV in % for nominal product thickness in mm		
EN 10027-1	EN 10027-2	> 40 ≤ 150	> 150 ≤ 250	> 250 ≤ 400
S235JR	1,0038	0,38	0,40	0,40
S235J0	1,0114			
S235J2	1,0117			
S275JR	1,0044	0,42	0,44	0,44
S275J0	1,0143			
S275J2	1,0145			
S335JR	1,0045	0,47	0,49	0,49
S335J0	1,0553			
S335J2	1,0577			
S335K2	1,0596			

 DONALAM AFV BELTRAME GROUP	DoP-DECLARATION OF PERFORMANCE No.: 02 (according to regulation EU No. 305/2011)	 2028
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1. Unique identification code of the product-type:

Hot rolled round bars on following steel grades according to EN 10027-1 and EN 10027-2:

S355N/1.0545 ; S355NL/1.0546

2. Intended use of the construction product, in accordance with the applicable harmonised technical specification: **EN 10025-1:2004.**

Non-alloy structural steel used for general mechanical engineering in construction structures.

3. Name and contact address of the manufacturer:

**DONALAM S.R.L. Prelungirea Bucuresti Nr. 246R
910125 Calarasi Romania**

4. System of assessment and verification of constancy of performance of the construction product:

2+

5. Name and identification number of the notified body:

**No.-2028-RINA SIMTEX-OC Bucuresti,
Str. Leonte Anastasievici, Nr. 4D, sector 5, Romania**

6. Reference number of evaluation report and of certificate of conformity:

**Report code: 23 SX 159 PC dated 2023-05-15.
Certificate of conformity of the factory production control 2028-CPR-638-2023**

7. Declared performance:

Essential characteristics	Requirement clauses in European Standards	Performance	Harmonised technical specification
Tolerances on dimension and shapes	7.7.1	EN 10060:2003	EN 10025-3:2019
Elongation	7.3.1	Annex 1	
Tensile strength	7.3.1		
Yield strength	7.3.1		
Impact test	7.3.1 + 7.3.2		
Chemical analysis	7.2.1	Annex 2	
Weldability (Chemical composition)	7.2 + 7.4.1	NPD	
Durability (Chemical composition)	7.2 + 7.4.3	NPD	

8. Performance of the product identified in point 1 is in conformity with the declared performance in point 7

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.

Signed on behalf of DONALAM S.R.L.
Calarasi, 26.04.2023

Quality Manager





Annex 1 - Essential characteristics - Mechanical properties

Mechanical properties at ambient temperature									
Designation		Minimum yield strength ReH N/mm ²				Minimum tensile strength Rm N/mm ²			
		Nominal thickness mm				Nominal thickness mm			
		> 80 ≤ 100	> 100 ≤ 150	> 150 ≤ 200	> 200 ≤ 250	≤ 100	> 100 ≤ 200	> 200 ≤ 250	
EN 10027-1	EN 10027-2								
S355N	1,0545	315	295	285	275	470 to 630	450 to 600	450 to 600	
S355NL	1,0546								



Mechanical properties at ambient temperature									
Designation		Orientation of test pieces	Minimum percentage elongation after fracture A% Lo=5,65vSo						
			Nominal thickness mm						
			> 80 ≤ 200			> 200 ≤ 250			
EN 10027-1	EN 10027-2								
S355N	1,0545	I	21			21			
S355NL	1,0546								

Impact energy KV2 on longitudinal test pieces									
Designation		Minimum values of impact energy KV2 in J at test temperatures, in °C							
EN 10027-1	EN 10027-2	+20	0	-10	-20	-30	-40	-50	
S355N	1,0545	55	47	43	40	-	-	-	
S355NL	1,0546	63	55	51	47	40	31	27	

Annex 2 - Essential characteristics - Chemical composition

Chemical composition of the heat analysis															
Designation		C % max.	Si % max.	Mn %	P % max.	S % max.	Nb % max.	V % max.	Al total % min.	Ti % max.	Cr % max.	Ni % max.	Mo % max.	Cu % max.	N % max.
EN 10027-1	EN 10027-2														
S355N	1,0545	0,20	0,50	0,90 to 1,65	0,030	0,025	0,05	0,12	0,02	0,05	0,30	0,50	0,10	0,55	0,015
S355NL	1,0546	0,18		0,025	0,020										

Maximum CEV based on heat analysis									
Designation		Maximum CEV in % for nominal product thickness in mm							
EN 10027-1	EN 10027-2	>63 ≤ 100				> 100 ≤ 250			
S355N	1,0545	0,45				0,45			
S355NL	1,0546								

	DoP-DECLARATION OF PERFORMANCE No.: 03 (according to regulation EU No. 305/2011)	 2028
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1. Unique identification code of the product-type:

**Hot rolled round bars on following steel grades according to EN 10027-1 and EN 10027-2:
C35E /1.1181 ; C35R /1.1180 ; C45E /1.1191 ; C45R/1.1201 ; 25CrMo4 /1.7218 ;
42CrMo4 /1.7225 ; 50CrMo4 /1.7228 ; 34CrNiMo6 /1.6582 ; 51CrV4 /1.8159.**

2. Intended use of the construction product, in accordance with the applicable harmonised technical specification: **EN 10343:2009.**

Non-alloy and alloy steel for quencing and tempering used for general mechanical engineering in construction structures.

3. Name and contact address of the manufacturer:

**DONALAM S.R.L. Prelungirea Bucuresti Nr. 246R
910125 Calarasi Romania**

4. System of assessment and verification of constancy of performance of the construction product:
2+

5. Name and identification number of the notified body:

**No.-2028-RINA SIMTEX-OC Bucuresti,
Str. Leonte Anastasievici, Nr. 4D, sector 5, Romania**

6. Reference number of evaluation report and of certificate of conformity:

**Report code: 23 SX 159 PC dated 2023-05-15.
Certificate of conformity of the factory production control 2028-CPR-639-2023**

7. Declared performance:

Essential characteristics	Requirement clauses in European Standards	Performance	Harmonised technical specification
Tolerances on dimension and shapes	7.7.1	EN 10060:2003	EN 10343:2009
Elongation	7.3.1	TABLE 1	
Tensile strength	7.3.1		
Yeld strength	7.3.1		
Impact test	7.3.1 + 7.3.2		
Chemical analysis	7.2.1	TABLE 2	
Weldability (Chemical composition)	7.2 + 7.4.1	NPD	
Durability (Chemical composition)	7.2 + 7.4.3	NPD	



8. Performance of the product identified in point 1 is in conformity with the declared performance in point 7

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.

Signed on behalf of DONALAM S.R.L.
Calarasi, 26.04.2023

Quality Manager





	DoP-DECLARATION OF PERFORMANCE No.: 03 (according to regulation EU No. 305/2011)	 2028
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Annex 1 - Essential characteristics - Mechanical properties

Mechanical properties at ambient temperature in quenched and tempered (+QT) condition																
Designation		40 mm < d ≤ 100 mm					100 mm < d ≤ 160 mm					160 mm < d ≤ 250 mm				
		Re min.	Rm	A min.	Z min.	KV min.	Re min.	Rm	A min.	Z min.	KV min.	Re min.	Rm	A min.	Z min.	KV min.
EN 10027-1	EN 10027-2	MPa					MPa					MPa				
C35E	1,1181	320	550 to 700	20	50	35	-	-	-	-	-	-	-	-	-	
C35R	1,1180						-	-	-	-	-	-	-	-	-	-
C45E	1,1191	370	630 to 780	17	45	25	-	-	-	-	-	-	-	-	-	
C45R	1,1201						-	-	-	-	-	-	-	-	-	-
25CrMo4	1,7218	450	700 to 850	15	60	50	400	650 to 800	16	60	45	-	-	-	-	
42CrMo4	1,7225	650	900 to 1100	12	50	35	550	800 to 950	13	50	35	500	750 to 900	14	55	35
50CrMo4	1,7228	700	900 to 1100	12	50	30	650	850 to 1000	13	50	30	550	800 to 950	13	50	30
34CrNiMo6	1,6582	800	1000 to 1200	11	50	45	700	900 to 1100	12	55	45	600	800 to 950	13	55	45
51CrV4	1,8159	700	900 to 1100	12	50	30	650	850 to 1100	13	50	30	600	800 to 950	13	50	30

Mechanical properties at ambient temperature in normalized (+N) condition									
Designation		16 mm < d ≤ 100 mm				100 mm < d ≤ 250 mm			
		Re min.	Rm min.	A min.	KV min.	Re min.		A min.	KV min.
EN 10027-1	EN 10027-2	MPa		%	J	MPa		%	J
C35E	1,1181	270	520	19	20	245	500	19	20
C35R	1,118								
C45E	1,1191	305	580	16	12	275	560	16	12
C45R	1,1201								

	DoP-DECLARATION OF PERFORMANCE No.: 03 (according to regulation EU No. 305/2011)	 2028
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Annex 2 - Essential characteristics - Chemical composition

Chemical composition of the heat analysis												
Designation		C %	Si % max.	Mn %	P % max.	S %	Cr %	Mo %	Ni %	Cr+Mo +Ni % max.	V	B
EN 10027-1	EN 10027-2											
C35E	1,1181	0,32 to 0,39	0,40	0,50 to 0,80	0,030	max. 0,035	0,40	0,10	0,40	0,63	-	-
C35R	1,118	0,32 to 0,39	0,40	0,50 to 0,80	0,030	0,02 to 0,04	0,40	0,10	0,40	0,63	-	-
C45E	1,1191	0,42 to 0,50	0,40	0,50 to 0,80	0,030	max. 0,035	0,40	0,10	0,40	0,63	-	-
C45R	1,1201	0,42 to 0,50	0,40	0,50 to 0,80	0,030	0,02 to 0,04	0,40	0,10	0,40	0,63	-	-
25CrMo4	1,7218	0,22 to 0,29	0,40	0,60 to 0,90	0,025	max. 0,035	0,90 to 1,20	0,15 to 0,30	-	-	-	-
42CrMo4	1,7225	0,38 to 0,45	0,40	0,60 to 0,90	0,025	max. 0,035	0,90 to 1,20	0,15 to 0,30	-	-	-	-
50CrMo4	1,7228	0,46 to 0,54	0,40	0,50 to 0,80	0,025	max. 0,035	0,90 to 1,20	0,15 to 0,30	-	-	-	-
34CrNiMo6	1,6582	0,30 to 0,38	0,40	0,50 to 0,80	0,025	max. 0,035	1,30 to 1,70	0,15 to 0,30	1,30 to 1,70	-	-	-
51CrV4	1,8159	0,47 to 0,55	0,40	0,70 to 1,10	0,025	max. 0,025	0,90 to 1,20	-	-	-	0,10 to 0,25	-