CE	**STATEMENT OF CHARACTERISTICS** **In accordance with the Construction Products Regulation No: 305/2011** **Nr.:** 17/01

1. Unique identification of the product type:
TX1 / TX1 A4

2. Intended use or intended uses of the construction product in accordance with the harmonized technical specification in force as foreseen by the manufacturer:
Torque controlled expansion anchor of size M8, M10, M12 and M16 for use in cracked and non-cracked concrete

3. Name, registered trade name or registered trade mark and address of the manufacturer in accordance with article 11 (5):
AS system d.o.o., Obrtniška ulica 14, 3240 Šmarje pri Jelšah, Slovenija, www.as-system.si

4.System or systems of assessment and verification of constancy of performance of a construction product, as specified in Annex V:
System 1

5. European Assessment Document:	**EAD 330232-00-0601**
European Technical Assessment:	**ETA-17/0638**
Technical Assessment Body:	**ZAG**

6. Declaration of performance: 1404-CPR-2972	
Notified Body:	**ZAG (1404)**

Features listed:			Dimension			
			M8	M10	M12	M16
Installation information						
d_0	Nominal drill diameter	[mm]	8	10	12	16
h_{nom}	Anchoring depth	[mm]	55	60	80	100
h_{ef}	Effective anchoring depth	[mm]	41	45	62	88
h_{min}	Minimum thickness of the concrete element	[mm]	100	120	140	160
T_{inst}	Tightening torque	[Nm]	15	25	65	110
S_{min}	Minimum spacing	[mm]	45	60	70	60
C_{min}	Minimal deviation from the edge	[mm]	45	70	85	70
Tensile failure of TX1 steel						
$N_{Rk,s}$	Characteristic resistance for steel failure	[kN]	15	22	45	68
γ_{MsN}	Partial safety factor	[-]	1,4			
Tensile failure of TX1 A4						
$N_{Rk,s}$	Characteristic resistance for steel failure	[kN]	15	25	47	79
γ_{MsN}	Partial safety factor	[-]	1,4			
Izvlek sidra						
$N_{Rk,p}$	Characteristic tensile strength in uncracked concrete	[kN]	/1)	11	18	25
$N_{Rk,p}$	Characteristic tensile strength in cracked concrete	[kN]	4	6	8	18
$\gamma 2$	Partial safety factor	[-]	1,0			
γ_{Mp}		[-]	1,5			
$S_{cr,N}$	Characteristic spacing	[mm]	3 x h_{ef}			
$C_{cr,N}$	Characteristic deviation from the edge	[mm]	1,5 x h_{ef}			
ψc C30/37	Factor to increase the value of Nrk.in cracked concrete	[-]	1,00	1,08	1,22	1,21
ψc C40/50		[-]	1,00	1,14	1,41	1,39
ψc C50/60		[-]	1,00	1,20	1,58	1,55
Formation of a concrete cone						
k_{cr}	Cracked concrete factor CEN/TS 1992-4-4 §. 7.2.1.4	[-]	7,7			
k_{ucr}	Uncracked concrete factor CEN/TS 1992-4-4 §. 6.2.1.4	[-]	11,0			
γ_{Mc}	Partial safety factor	[-]	1,5			
Split rupture						
$S_{cr,sp}$	Characteristic spacing	[mm]	3 x h_{ef}			
$C_{cr,sp}$	Characteristic deviation from the edge	[mm]	1,5 x h_{ef}			
γ_{Mc}	Partial safety factor	[-]	1,5			
Tensile loads between users						
Uncracked concrete C20/25						
N	Tensile load during use	[kN]	6,20	5,20	8,60	11,90
δ_{N0}	Short – term shift	[mm]	0,12	0,06	0,05	0,17
$\delta_{N\infty}$	Long shift	[mm]	1,56	1,59	1,73	1,65
Cracked concrete C20/25						
N	Tensile load during use	[kN]	1,90	2,90	3,80	8,60
δ_{N0}	Short – term shift	[mm]	0,83	0,80	0,49	1,40
$\delta_{N\infty}$	Long shift	[mm]	1,56	1,59	1,73	1,65

1) **The pull-out is not decisive**

The characteristics of the product referred to in point 1, in accordance with the characteristics set out in point 7.

The manufacturer referred to in point 3 is solely responsible for issuing this declaration of performance:

Signed for and on behalf of the manufacturer:

Name and position	Place and date of issue	Signature
Aleš Seidl, direktor	**Šmarje pri Jelšah, 25.09.2020**	