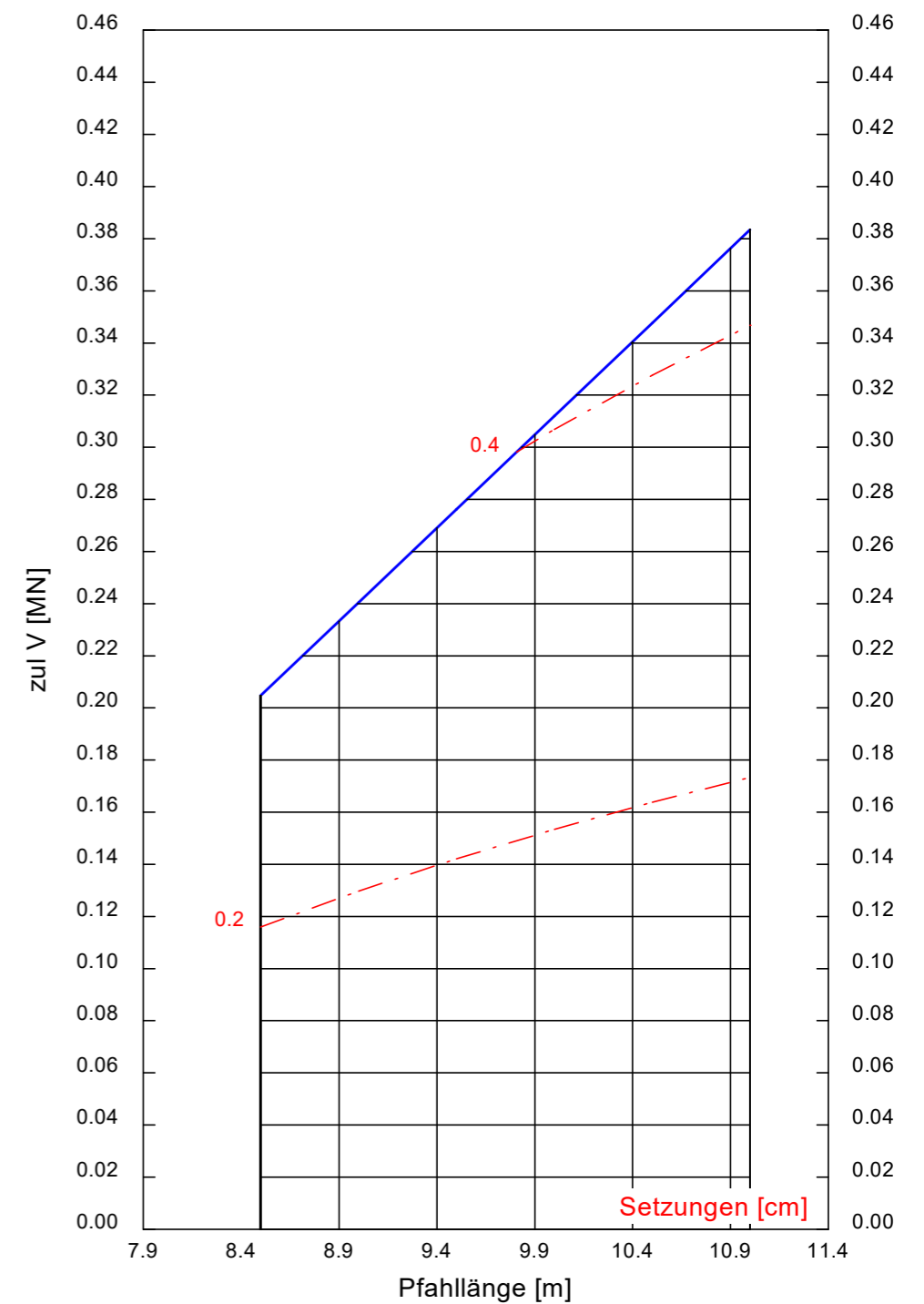
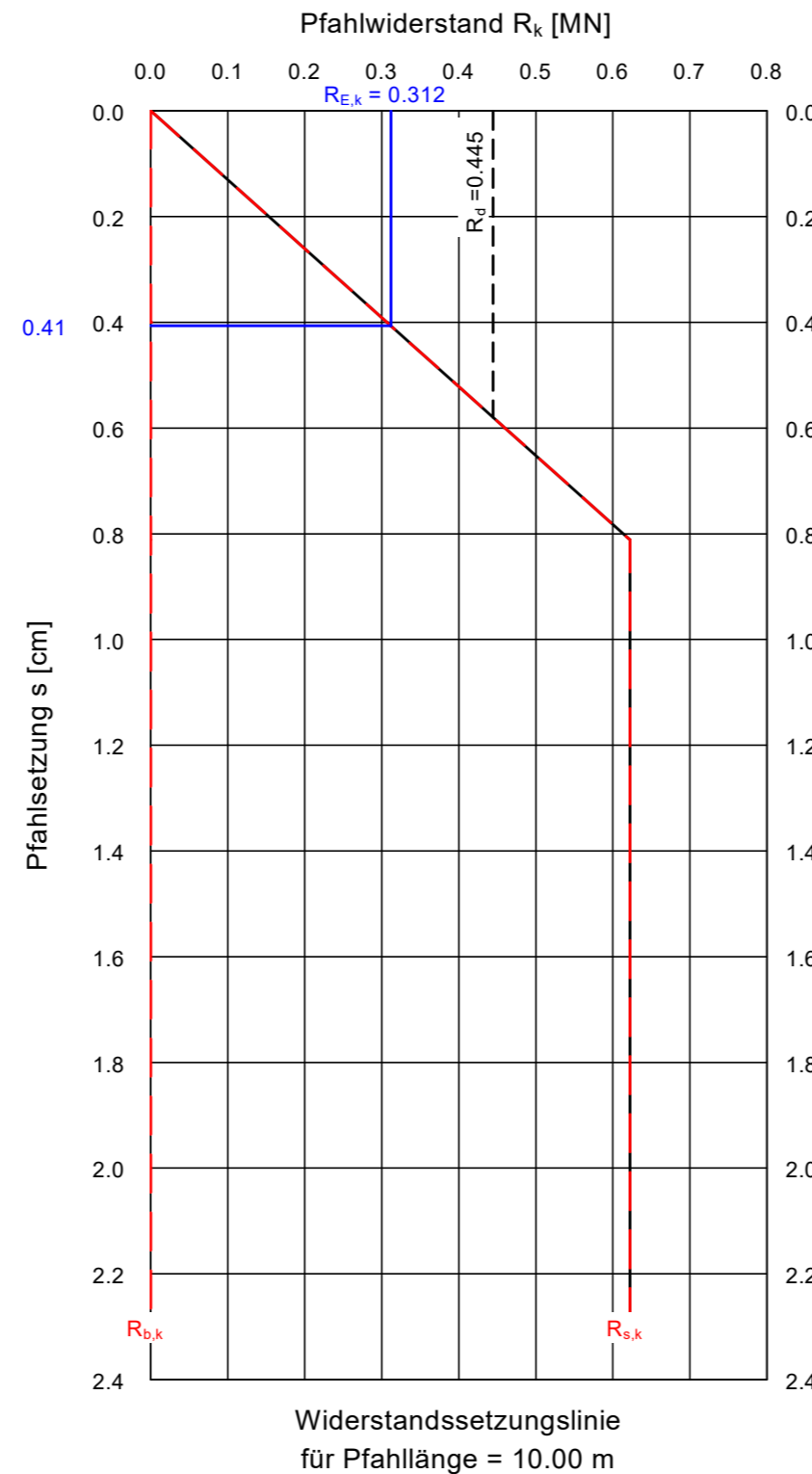


Boden	q <sub>c</sub> [MN/m <sup>2</sup> ]	c <sub>u,k</sub> [kN/m <sup>2</sup> ]	q <sub>b,k02</sub> [MN/m <sup>2</sup> ]	q <sub>b,k03</sub> [MN/m <sup>2</sup> ]	q <sub>b,k10</sub> [MN/m <sup>2</sup> ]	q <sub>s,k</sub> [MN/m <sup>2</sup> ]	Bezeichnung
	0.0	15.0	0.000	0.000	0.000	0.0138	Auffüllung
	18.0	0.0	0.000	0.000	0.000	0.2270	Kies

Berechnungsgrundlagen  
 Norm: EC 7  
 Verpresster Mikropfahl  
 Verhältniswert (min, max) = 0.00  
 Interpolation Mantelreibung:  
 bei q<sub>c</sub> < 7.5 MN/m<sup>2</sup> deaktiviert  
 bei c<sub>u,k</sub> < 60 kN/m<sup>2</sup> aktiviert  
 Pfahldurchmesser = 0.200 m  
 γ<sub>P</sub> = 1.40  
 γ<sub>G</sub> = 1.35

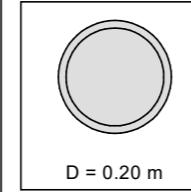
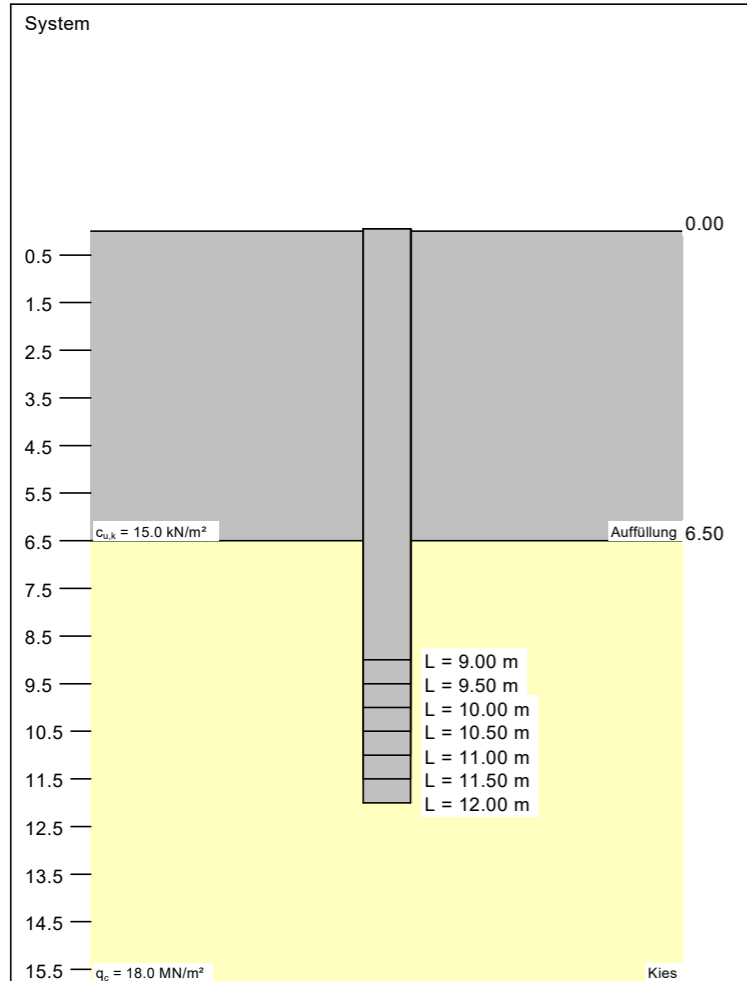
γ<sub>Q</sub> = 1.50  
 Anteil Veränderliche Lasten = 0.500  
 γ<sub>(G,Q)</sub> = 0.500 · γ<sub>Q</sub> + (1 - 0.500) · γ<sub>G</sub>  
 γ<sub>(G,Q)</sub> = 1.425

Zul V  
 - - - - - Setzung



D [m]	Länge [m]	R <sub>k</sub> [MN]	R <sub>d</sub> [MN]	R <sub>E,k</sub> [MN]	zul V [MN]	s [cm]
0.200	8.50	0.408	0.292	0.205	0.205	0.35
0.200	9.00	0.480	0.343	0.240	0.240	0.37
0.200	9.50	0.551	0.394	0.276	0.276	0.39
0.200	10.00	0.622	0.445	0.312	0.312	0.41
0.200	10.50	0.694	0.495	0.348	0.348	0.42
0.200	11.00	0.765	0.546	0.383	0.383	0.44

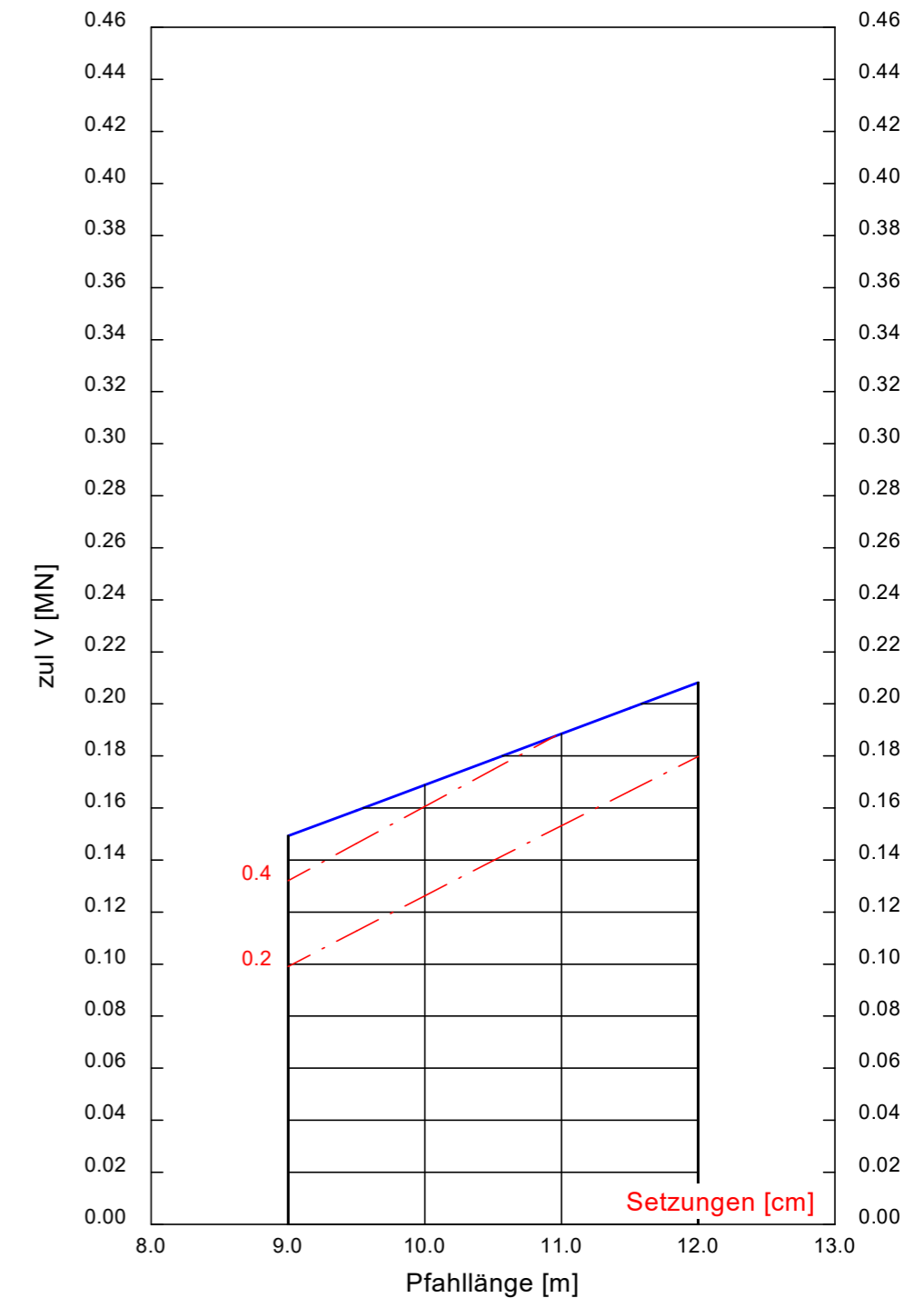
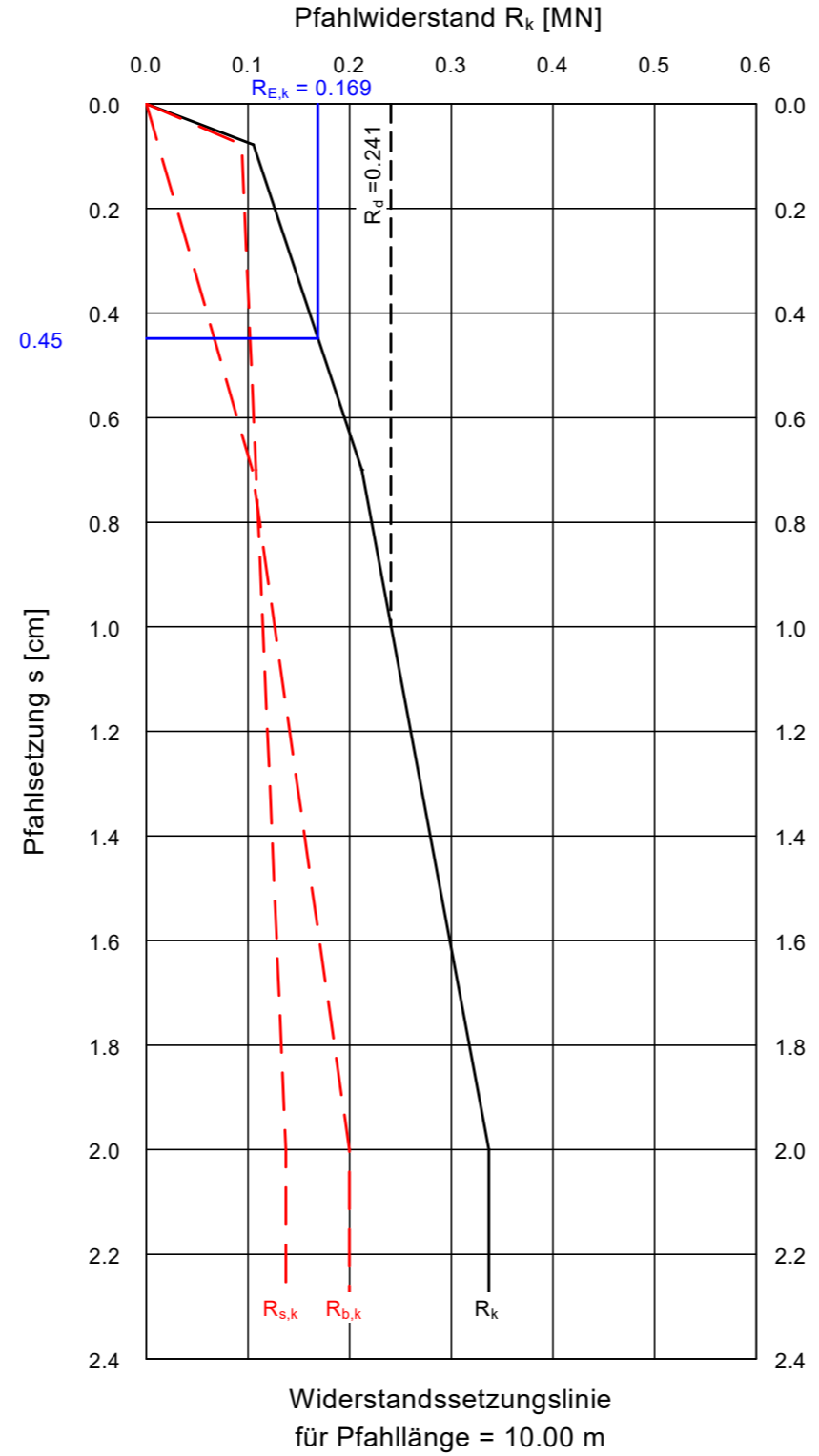
zul V = R<sub>E,k</sub> = R<sub>k</sub> / (γ<sub>P</sub> · γ<sub>(G,Q)</sub>) = R<sub>k</sub> / (1.400 · 1.425) = R<sub>k</sub> / 1.99 [γ<sub>(G,Q)</sub> = 1.425]



Boden	$q_c$ [MN/m <sup>2</sup> ]	$c_{u,k}$ [kN/m <sup>2</sup> ]	$q_{b,k35}$ [MN/m <sup>2</sup> ]	$q_{b,k10}$ [MN/m <sup>2</sup> ]	$q_{s(eg),k}$ [MN/m <sup>2</sup> ]	$q_{s(eg),k}$ [MN/m <sup>2</sup> ]	Bezeichnung
■	0.0	15.0	0.000	0.000	0.0000	0.0000	Auffüllung
■	18.0	0.0	4.150	7.945	0.0710	0.1040	Kies

Berechnungsgrundlagen  
 Norm: EC 7  
 Fertigrammpfahl  
 Geschlossenes Stahlrohr  
 Verhältniswert (min, max) = 0.00  
 Interpolation Mantelreibung:  
 bei  $q_c < 7.5$  MN/m<sup>2</sup> deaktiviert  
 bei  $c_{u,k} < 60$  kN/m<sup>2</sup> deaktiviert  
 $\eta_b = 0.800$   
 $\eta_s = 0.600$

Pfahldurchmesser = 0.200 m  
 $\gamma_P = 1.40$   
 $\gamma_G = 1.35$   
 $\gamma_Q = 1.50$   
 Anteil Veränderliche Lasten = 0.500  
 $\gamma_{(G,Q)} = 0.500 \cdot \gamma_Q + (1 - 0.500) \cdot \gamma_G$   
 $\gamma_{(G,Q)} = 1.425$   
 — Zul V  
 - - - - - Setzung



D [m]	Länge [m]	$R_k$ [MN]	$R_d$ [MN]	$R_{E,k}$ [MN]	zul V [MN]	s [cm]
0.200	9.00	0.298	0.213	0.149	0.149	0.50
0.200	9.50	0.317	0.227	0.159	0.159	0.48
0.200	10.00	0.337	0.241	0.169	0.169	0.45
0.200	10.50	0.357	0.255	0.179	0.179	0.42
0.200	11.00	0.376	0.269	0.189	0.189	0.40
0.200	11.50	0.396	0.283	0.198	0.198	0.37
0.200	12.00	0.415	0.297	0.208	0.208	0.35

$zul V = R_{E,k} = R_k / (\gamma_P \cdot \gamma_{(G,Q)}) = R_k / (1.400 \cdot 1.425) = R_k / 1.99$  [ $\gamma_{(G,Q)} = 1.425$ ]