

**UTWARDZENIE NAWIERZCHNI DROGI POMIĘDZY HERMANOWEM I I HERMANOWEM
II W TECHNOLOGII EMULSYJNO GRYSOWEJ W CIĄGU DROGI GMINNEJ 108023E**

Wykaz przekrojów i obliczeń rzędnych projektowanych

| Przekrój | km | odl. | spadek | przyrost | rz. wyjśc. | rz. istn. | rzędna spadku | zmiana niwelety | łuk pionowy | rzędna proj. |
|----------------|-------|------|--------------|----------|------------|---------------|------------------|--------------------|----------------|-----------------|
| | m | m | % | | m | m | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| kraw. drogi | 0 | | | | 189.76 | 189.76 | 189.76 | 0.00 | | 189.76 |
| - | 10 | 10 | 0.10 | 0.01 | 189.77 | 189.77 | 189.77 | 0.00 | | 189.77 |
| - | 11.4 | 1.4 | 0.10 | 0.00 | 189.77 | 189.77 | 189.77 | 0.00 | | 189.77 |
| - | | 5.66 | 0.10 | 0.01 | 189.77 | 189.77 | 189.77 | 0.00 | | 189.77 |
| skrzyż. | 17.06 | 2.94 | 0.10 | 0.00 | 189.78 | 189.78 | 189.78 | 0.00 | | 189.78 |
| - | 20 | 4.1 | 0.10 | 0.00 | 189.78 | 189.73 | 189.78 | 0.05 | | 189.78 |
| kraw. asf. | 24.1 | 5.9 | 0.30 | 0.02 | 189.78 | 189.67 | 189.78 | 0.11 | | 189.78 |
| - | 30 | 10 | 0.30 | 0.03 | 189.80 | 189.69 | 189.80 | 0.11 | | 189.80 |
| - | 40 | 10 | 0.30 | 0.03 | 189.83 | 189.71 | 189.83 | 0.12 | | 189.83 |
| - | 50 | 10 | 0.30 | 0.03 | 189.86 | 189.74 | 189.86 | 0.12 | | 189.86 |
| - | 60 | 7 | 0.30 | 0.02 | 189.89 | 189.77 | 189.89 | 0.12 | | 189.89 |
| - | 67 | 3 | 0.30 | 0.01 | 189.91 | 189.79 | 189.91 | 0.12 | | 189.91 |
| - | 70 | 10 | 0.30 | 0.03 | 189.92 | 189.79 | 189.92 | 0.13 | | 189.92 |
| - | 80 | 10 | 0.30 | 0.03 | 189.95 | 189.80 | 189.95 | 0.15 | | 189.95 |
| - | 90 | 10 | 0.30 | 0.03 | 189.98 | 189.81 | 189.98 | 0.17 | | 189.98 |
| - | 100 | 10 | 0.30 | 0.03 | 190.01 | 189.82 | 190.01 | 0.19 | | 190.01 |
| - | 110 | 7 | 0.30 | 0.02 | 190.04 | 189.84 | 190.04 | 0.20 | | 190.04 |
| - | 117 | 3 | 0.30 | 0.01 | 190.06 | 189.84 | 190.06 | 0.22 | | 190.06 |
| - | 120 | 10 | 0.30 | 0.03 | 190.07 | 189.85 | 190.07 | 0.22 | | 190.07 |
| - | 130 | 3.5 | -0.50 | -0.02 | 190.10 | 189.86 | 190.10 | 0.24 | | 190.10 |
| - | 133.5 | 6.5 | -0.50 | -0.03 | 190.08 | 189.86 | 190.08 | 0.22 | | 190.08 |
| - | 140 | 10 | -0.50 | -0.05 | 190.05 | 189.83 | 190.05 | 0.22 | | 190.05 |
| - | 150 | 10 | -0.50 | -0.05 | 190.00 | 189.78 | 190.00 | 0.22 | | 190.00 |
| - | 160 | 7 | -0.50 | -0.04 | 189.95 | 189.73 | 189.95 | 0.22 | | 189.95 |
| - | 167 | 3 | -0.50 | -0.02 | 189.92 | 189.70 | 189.92 | 0.22 | | 189.92 |
| - | 170 | 10 | -0.50 | -0.05 | 189.90 | 189.68 | 189.90 | 0.22 | | 189.90 |
| - | 180 | 10 | -0.50 | -0.05 | 189.85 | 189.63 | 189.85 | 0.22 | | 189.85 |

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| - | 190 | 10 | -0.50 | -0.05 | 189.80 | 189.58 | 189.80 | 0.22 | | 189.80 |
| - | 200 | 10 | -0.50 | -0.05 | 189.75 | 189.53 | 189.75 | 0.22 | | 189.75 |
| - | 210 | 7 | -0.50 | -0.04 | 189.70 | 189.48 | 189.70 | 0.22 | | 189.70 |
| - | 217 | 3 | -0.50 | -0.02 | 189.67 | 189.44 | 189.67 | 0.23 | | 189.67 |
| - | 220 | 10 | -0.50 | -0.05 | 189.65 | 189.44 | 189.65 | 0.21 | | 189.65 |
| - | 230 | 10 | -0.50 | -0.05 | 189.60 | 189.38 | 189.60 | 0.22 | | 189.60 |
| - | 240 | 10 | -0.50 | -0.05 | 189.55 | 189.34 | 189.55 | 0.21 | | 189.55 |
| - | 250 | 10 | -0.50 | -0.05 | 189.50 | 189.29 | 189.50 | 0.21 | | 189.50 |
| - | 260 | 10 | -0.80 | -0.08 | 189.45 | 189.25 | 189.45 | 0.20 | | 189.45 |
| - | 270 | 10 | -0.80 | -0.08 | 189.37 | 189.17 | 189.37 | 0.20 | | 189.37 |
| - | 280 | 10 | -0.80 | -0.08 | 189.29 | 189.08 | 189.29 | 0.21 | | 189.29 |
| - | 290 | 10 | -0.80 | -0.08 | 189.21 | 188.99 | 189.21 | 0.22 | | 189.21 |
| - | 300 | 10 | -0.80 | -0.08 | 189.13 | 188.90 | 189.13 | 0.23 | | 189.13 |
| - | 310 | 7 | -0.80 | -0.06 | 189.05 | 188.81 | 189.05 | 0.24 | | 189.05 |
| - | 317 | 3 | -0.80 | -0.02 | 189.00 | 188.79 | 189.00 | 0.21 | | 189.00 |
| - | 320 | 10 | -0.15 | -0.02 | 188.97 | 188.78 | 188.97 | 0.19 | | 188.97 |
| - | 330 | 10 | -0.15 | -0.02 | 188.96 | 188.75 | 188.96 | 0.21 | | 188.96 |
| - | 340 | 11.4 | -0.15 | -0.02 | 188.94 | 188.72 | 188.94 | 0.22 | | 188.94 |
| - | 351.4 | 8.6 | -0.15 | -0.01 | 188.92 | 188.68 | 188.92 | 0.24 | | 188.92 |
| - | 360 | 10 | -0.15 | -0.02 | 188.91 | 188.65 | 188.91 | 0.26 | | 188.91 |
| - | 370 | 10 | -0.15 | -0.02 | 188.90 | 188.60 | 188.90 | 0.30 | | 188.90 |
| - | 380 | 10 | -0.15 | -0.02 | 188.88 | 188.56 | 188.88 | 0.32 | | 188.88 |
| - | 390 | 10 | -0.15 | -0.02 | 188.87 | 188.52 | 188.87 | 0.35 | | 188.87 |
| - | 400 | 10 | -0.15 | -0.02 | 188.85 | 188.55 | 188.85 | 0.30 | | 188.85 |
| - | 410 | 7 | -0.15 | -0.01 | 188.84 | 188.59 | 188.84 | 0.25 | | 188.84 |
| - | 417 | 3 | -0.15 | 0.00 | 188.83 | 188.61 | 188.83 | 0.22 | | 188.83 |
| - | 420 | 10 | -0.15 | -0.02 | 188.82 | 188.62 | 188.82 | 0.20 | | 188.82 |
| - | 430 | 10 | -0.15 | -0.02 | 188.81 | 188.65 | 188.81 | 0.16 | | 188.81 |
| - | 440 | 10 | -0.15 | -0.02 | 188.79 | 188.66 | 188.79 | 0.13 | | 188.79 |
| - | 450 | 10 | -0.15 | -0.02 | 188.78 | 188.67 | 188.78 | 0.11 | | 188.78 |

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| - | 460 | 5.4 | -0.15 | -0.01 | 188.76 | 188.68 | 188.76 | 0.08 | | 188.76 |
| - | 465.4 | 4.6 | -0.15 | -0.01 | 188.75 | 188.68 | 188.75 | 0.07 | | 188.75 |
| - | 470 | 10 | -0.15 | -0.02 | 188.75 | 188.65 | 188.75 | 0.10 | | 188.75 |
| - | 480 | 10 | -0.15 | -0.02 | 188.73 | 188.59 | 188.73 | 0.14 | | 188.73 |
| - | 490 | 10 | -0.15 | -0.02 | 188.72 | 188.53 | 188.72 | 0.19 | | 188.72 |
| - | 500 | 3.8 | -1.50 | -0.06 | 188.70 | 188.46 | 188.70 | 0.24 | | 188.70 |
| - | 503.8 | 6.2 | -1.50 | -0.09 | 188.64 | 188.44 | 188.64 | 0.20 | | 188.64 |
| - | 510 | 7 | -1.50 | -0.11 | 188.55 | 188.34 | 188.55 | 0.21 | | 188.55 |
| - | 517 | 3 | -1.50 | -0.05 | 188.45 | 188.23 | 188.45 | 0.22 | | 188.45 |
| - | 520 | 10 | -1.50 | -0.15 | 188.40 | 188.18 | 188.40 | 0.22 | | 188.40 |
| - | 530 | 10 | -1.50 | -0.15 | 188.25 | 188.03 | 188.25 | 0.22 | | 188.25 |
| - | 540 | 1.8 | -1.50 | -0.03 | 188.10 | 187.87 | 188.10 | 0.23 | | 188.10 |
| - | 541.8 | 8.2 | -1.50 | -0.12 | 188.07 | 187.84 | 188.07 | 0.23 | | 188.07 |
| - | 550 | 10 | -1.50 | -0.15 | 187.95 | 187.74 | 187.95 | 0.21 | | 187.95 |
| - | 560 | 10 | -1.50 | -0.15 | 187.80 | 187.62 | 187.80 | 0.18 | | 187.80 |
| - | 570 | 7.5 | 0.60 | 0.05 | 187.65 | 187.49 | 187.65 | 0.16 | | 187.65 |
| - | 577.5 | 2.5 | 0.60 | 0.02 | 187.70 | 187.40 | 187.70 | 0.30 | | 187.70 |
| - | 580 | 10 | 0.60 | 0.06 | 187.71 | 187.42 | 187.71 | 0.29 | | 187.71 |
| - | 590 | 10 | 0.60 | 0.06 | 187.77 | 187.49 | 187.77 | 0.28 | | 187.77 |
| - | 600 | 6.8 | 0.60 | 0.04 | 187.83 | 187.56 | 187.83 | 0.27 | | 187.83 |
| przepust | 606.8 | 3.2 | 0.60 | 0.02 | 187.87 | 187.61 | 187.87 | 0.26 | | 187.87 |
| - | 610 | 7 | 0.60 | 0.04 | 187.89 | 187.61 | 187.89 | 0.28 | | 187.89 |
| - | 617 | 3 | 0.60 | 0.02 | 187.93 | 187.62 | 187.93 | 0.31 | | 187.93 |
| - | 620 | 7.6 | 0.85 | 0.06 | 187.95 | 187.62 | 187.95 | 0.33 | | 187.95 |
| - | 627.6 | 2.4 | 0.85 | 0.02 | 188.02 | 187.63 | 188.02 | 0.39 | | 188.02 |
| - | 630 | 10 | 0.85 | 0.09 | 188.04 | 187.66 | 188.04 | 0.38 | | 188.04 |
| - | 640 | 10 | 0.85 | 0.09 | 188.12 | 187.77 | 188.12 | 0.35 | | 188.12 |
| - | 650 | 10 | 0.85 | 0.09 | 188.21 | 187.88 | 188.21 | 0.33 | | 188.21 |
| - | 660 | 10 | 0.85 | 0.09 | 188.29 | 188.00 | 188.29 | 0.29 | | 188.29 |
| - | 670 | 7.9 | 0.85 | 0.07 | 188.38 | 188.11 | 188.38 | 0.27 | | 188.38 |

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| - | 677.9 | 2.1 | 0.85 | 0.02 | 188.44 | 188.20 | 188.44 | 0.24 | | 188.44 |
| - | 680 | 10 | 0.85 | 0.09 | 188.46 | 188.22 | 188.46 | 0.24 | | 188.46 |
| - | 690 | 10 | 0.85 | 0.09 | 188.55 | 188.32 | 188.55 | 0.23 | | 188.55 |
| - | 700 | 10 | 0.85 | 0.09 | 188.63 | 188.42 | 188.63 | 0.21 | | 188.63 |
| - | 710 | 7 | 0.85 | 0.06 | 188.72 | 188.52 | 188.72 | 0.20 | | 188.72 |
| - | 717 | 3 | 0.85 | 0.03 | 188.78 | 188.59 | 188.78 | 0.19 | | 188.78 |
| - | 720 | 7 | 0.85 | 0.06 | 188.80 | 188.62 | 188.80 | 0.18 | | 188.80 |
| - | 727 | 3 | 0.85 | 0.03 | 188.86 | 188.69 | 188.86 | 0.17 | | 188.86 |
| - | 730 | 10 | 0.85 | 0.09 | 188.89 | 188.71 | 188.89 | 0.18 | | 188.89 |
| - | 740 | 10 | 0.85 | 0.09 | 188.97 | 188.76 | 188.97 | 0.21 | | 188.97 |
| - | 750 | 10 | 0.85 | 0.09 | 189.06 | 188.82 | 189.06 | 0.24 | | 189.06 |
| - | 760 | 10 | 0.25 | 0.03 | 189.14 | 188.88 | 189.14 | 0.26 | | 189.14 |
| - | 770 | 7.4 | 0.25 | 0.02 | 189.17 | 188.94 | 189.17 | 0.23 | | 189.17 |
| - | 777.4 | 2.6 | 0.25 | 0.01 | 189.19 | 188.98 | 189.19 | 0.21 | | 189.19 |
| - | 780 | 10 | 0.25 | 0.03 | 189.19 | 188.98 | 189.19 | 0.21 | | 189.19 |
| - | 790 | 10 | 0.25 | 0.03 | 189.22 | 189.00 | 189.22 | 0.22 | | 189.22 |
| - | 800 | 10 | 0.25 | 0.03 | 189.24 | 189.01 | 189.24 | 0.23 | | 189.24 |
| - | 810 | 7 | 0.25 | 0.02 | 189.27 | 189.02 | 189.27 | 0.25 | | 189.27 |
| - | 817 | 3 | 0.25 | 0.01 | 189.28 | 189.03 | 189.28 | 0.25 | | 189.28 |
| - | 820 | 10 | 0.25 | 0.03 | 189.29 | 189.04 | 189.29 | 0.25 | | 189.29 |
| - | 830 | 6.6 | 0.25 | 0.02 | 189.32 | 189.05 | 189.32 | 0.27 | | 189.32 |
| - | 836.6 | 3.4 | 0.25 | 0.01 | 189.33 | 189.06 | 189.33 | 0.27 | | 189.33 |
| - | 840 | 10 | 0.50 | 0.05 | 189.34 | 189.08 | 189.34 | 0.26 | | 189.34 |
| - | 850 | 10 | 0.50 | 0.05 | 189.39 | 189.12 | 189.39 | 0.27 | | 189.39 |
| - | 860 | 10 | 0.50 | 0.05 | 189.44 | 189.17 | 189.44 | 0.27 | | 189.44 |
| - | 870 | 10 | 0.50 | 0.05 | 189.49 | 189.21 | 189.49 | 0.28 | | 189.49 |
| - | 880 | 10 | 0.50 | 0.05 | 189.54 | 189.26 | 189.54 | 0.28 | | 189.54 |
| - | 890 | 10 | 0.50 | 0.05 | 189.59 | 189.31 | 189.59 | 0.28 | | 189.59 |
| - | 900 | 5 | 0.50 | 0.03 | 189.64 | 189.35 | 189.64 | 0.29 | | 189.64 |
| - | 905 | 5 | 0.50 | 0.03 | 189.67 | 189.38 | 189.67 | 0.29 | | 189.67 |

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| - | 910 | 7 | 1.10 | 0.08 | 189.69 | 189.43 | 189.69 | 0.26 | | 189.69 |
| - | 917 | 3 | 1.10 | 0.03 | 189.77 | 189.51 | 189.77 | 0.26 | | 189.77 |
| - | 920 | 4.8 | 1.10 | 0.05 | 189.80 | 189.54 | 189.80 | 0.26 | | 189.80 |
| - | 924.8 | 5.2 | 1.10 | 0.06 | 189.85 | 189.59 | 189.85 | 0.26 | | 189.85 |
| - | 930 | 10 | 1.10 | 0.11 | 189.91 | 189.66 | 189.91 | 0.25 | | 189.91 |
| - | 940 | 3.3 | 1.10 | 0.04 | 190.02 | 189.77 | 190.02 | 0.25 | | 190.02 |
| - | 943.3 | 6.7 | 1.10 | 0.07 | 190.06 | 189.81 | 190.06 | 0.25 | | 190.06 |
| - | 950 | 10 | 1.10 | 0.11 | 190.13 | 189.86 | 190.13 | 0.27 | | 190.13 |
| - | 960 | 10 | 1.10 | 0.11 | 190.24 | 189.94 | 190.24 | 0.30 | | 190.24 |
| - | 970 | 10 | 0.50 | 0.05 | 190.35 | 190.02 | 190.35 | 0.33 | | 190.35 |
| - | 980 | 5.6 | 0.50 | 0.03 | 190.40 | 190.10 | 190.40 | 0.30 | | 190.40 |
| - | 985.6 | 4.4 | 0.50 | 0.02 | 190.43 | 190.15 | 190.43 | 0.28 | | 190.43 |
| - | 990 | 10 | 0.50 | 0.05 | 190.45 | 190.17 | 190.45 | 0.28 | | 190.45 |
| - | 1000 | 10 | 0.20 | 0.02 | 190.50 | 190.23 | 190.50 | 0.27 | | 190.50 |
| - | 1010 | 10 | 0.20 | 0.02 | 190.52 | 190.28 | 190.52 | 0.24 | | 190.52 |
| - | 1020 | 4.69 | 0.20 | 0.01 | 190.54 | 190.33 | 190.54 | 0.21 | | 190.54 |
| skrzyż. | 1024.69 | 15.92 | 0.20 | 0.03 | 190.55 | 190.36 | 190.55 | 0.19 | | 190.55 |
| kraw. | 1040.61 | | | | 190.58 | 190.39 | 190.58 | 0.19 | | 190.58 |
| dr. | 1040.61 | 1040.61 | | 0.82 | | | 0.82 | | | |

Oznaczenia:

0 0.30% 5

5 -0.50% 2

0 0% 0