



AUTORYZOWANY DEALER  
FIRMY TSUBAKI – HOOVER POLSKA SP. Z.O.O.



## KULKI / BALLS



**GUMET Sz. Geneja Spółka Jawna**

ul. Kolejowa 12  
23-200 Kraśnik  
POLAND

tel. +48 81 825-32-41  
tel./fax +48 81 825-22-31

[gumet@gumet.pl](mailto:gumet@gumet.pl)  
[marketing@gumet.pl](mailto:marketing@gumet.pl)  
[www.gumet.pl](http://www.gumet.pl)  
[www.polandrubber.com](http://www.polandrubber.com)



**GUMET Sz. Geneja Spółka Jawna**  
23-200 Kraśnik, ul. Kolejowa 12, POLAND

tel. +48 81 825-32-41 e-mail: [gumet@gumet.pl](mailto:gumet@gumet.pl)  
tel./fax +48 81 825-22-31 e-mail: [marketing@gumet.pl](mailto:marketing@gumet.pl)

[www.gumet.pl](http://www.gumet.pl) [www.polandrubber.com](http://www.polandrubber.com)



Kulki wykonane ze stali łożyskowej mają zastosowanie głównie w przemyśle łożysk kulkowych oraz motoryzacyjnym. Charakteryzują się idealnie gładką powierzchnią, wysoką twardością i zdolnością do przenoszenia dużych obciążeń statycznych i dynamicznych. Do ich produkcji wykorzystywana jest najlepszej jakości stal pochodząca z najbardziej renomowanych hut. Powtarzalną jakość gwarantuje stosowana w całym procesie kontrola statystyczna (SPC). Oferujemy kulki w zakresie wymiarowym od 4 do 250 mm.

| <b>Material / Material</b>           | <b>ASTM</b> | <b>AISI</b> | <b>ISO/DIN</b> |
|--------------------------------------|-------------|-------------|----------------|
| <b>Stal łożyskowa / Chrome steel</b> | A295-46T    | 52100       | 100Cr6         |

| <b>Klasy dokładności kulek / Ball grades</b> |                   |
|--|-------------------|
| 5  | 5/32 – 3/8"       |
| 10   | 5/32 – 7/8"       |
| 16   | 5/32 – 1 1/16"    |
| 20 – 28                                      | 5 – 28            |
| 40   | 5/32 – 50,000 mm  |
| 100  | 5/32 – 100,000 mm |
| 200  | 5/32 – 250,000 mm |

Balls made of chrome steel are used mainly for bearings and many other industrial applications. Their characteristic feature is smooth surface, high hardness and they are able to carry high loadings thanks to new through hardening technology. The best quality steel is used for balls production coming only from verified source that meets high quality requirements. Small diameter balls are made of wire while large balls are made of forges. To ensure high ball surface quality the newest heat treatment equipment is used with very precise atmosphere and temperature control system that assure identical hardness and proper microstructure of each single ball. Manufacturing balls with strictly defined tolerance, surface precision and repeatable quality is guaranteed by statistical process control (SPC) introduced for all production process. We offer balls from 4 to 250 mm of diameter.



ISO 9001:2000  
ISO 14001:2004

**GUMET Sz. Geneja Spółka Jawna**  
23-200 Kraśnik, ul. Kolejowa 12, POLAND

tel. +48 81 825-32-41 e-mail: [gumet@gumet.pl](mailto:gumet@gumet.pl)  
tel./fax +48 81 825-22-31 e-mail: [marketing@gumet.pl](mailto:marketing@gumet.pl)

[www.gumet.pl](http://www.gumet.pl) [www.polandrubber.com](http://www.polandrubber.com)



| ŚREDNICA |        | WAGA NETTO   |
|----------|--------|--------------|
| DIAMETER |        | NETT WEIGHT  |
| cale     | mm     | kg/1000 szt. |
| inch     | mm     | kg/1000 pcs. |
| 5/32     | 3,969  | 0,254        |
|          | 4,000  | 0,260        |
|          | 4,500  | 0,371        |
| 3/16     | 4,762  | 0,439        |
|          | 5,000  | 0,509        |
|          | 5,500  | 0,677        |
| 7/32     | 5,556  | 0,698        |
| 15/64    | 5,953  | 0,858        |
|          | 6,000  | 0,879        |
| 1/4      | 6,350  | 1,042        |
|          | 6,500  | 1,117        |
| 17/64    | 6,747  | 1,250        |
|          | 7,000  | 1,395        |
| 9/32     | 7,144  | 1,483        |
|          | 7,500  | 1,716        |
| 5/16     | 7,938  | 2,035        |
|          | 8,000  | 2,083        |
|          | 8,500  | 2,499        |
| 11/32    | 8,731  | 2,708        |
|          | 9,000  | 4,710        |
| 23/64    | 9,128  | 3,094        |
| 3/8      | 9,525  | 3,516        |
| 25/64    | 9,922  | 3,974        |
|          | 10,000 | 4,086        |
| 13/32    | 10,319 | 4,470        |
|          | 10,500 | 4,710        |
|          | 11,000 | 5,415        |
| 7/16     | 11,112 | 5,582        |
| 29/64    | 11,509 | 6,202        |

| ŚREDNICA |        | WAGA NETTO   |
|----------|--------|--------------|
| DIAMETER |        | NETT WEIGHT  |
| cale     | mm     | kg/1000 szt. |
| inch     | mm     | kg/1000 pcs. |
| 15/32    | 11,906 | 6,866        |
|          | 12,000 | 7,026        |
| 31/64    | 12,303 | 7,576        |
|          | 12,500 | 7,946        |
| 1/2      | 12,700 | 8,333        |
| 17/32    | 13,494 | 9,996        |
|          | 14,000 | 11,158       |
| 9/16     | 14,228 | 11,870       |
|          | 14,600 | 12,662       |
|          | 14,800 | 13,194       |
| 19/32    | 15,081 | 13,960       |
|          | 15,500 | 15,150       |
| 5/8      | 15,875 | 16,280       |
|          | 16,104 | 16,991       |
| 21/32    | 16,669 | 18,840       |
|          | 17,000 | 19,977       |
| 11/16    | 17,462 | 21,860       |
|          | 17,500 | 21,805       |
|          | 17,700 | 22,560       |
|          | 18,000 | 23,7275      |
| 23/32    | 18,256 | 24,750       |
| 3/4      | 19,050 | 28,130       |
| 25/32    | 19,844 | 31,791       |
|          | 20,000 | 32,5469      |
| 13/16    | 20,638 | 35,770       |
| 27/32    | 21,431 | 40,050       |
|          | 22,000 | 43,32        |
| 7/8      | 22,225 | 44,660       |



ISO 9001:2000  
ISO 14001:2004

**GUMET Sz. Geneja Spółka Jawna**  
23-200 Kraśnik, ul. Kolejowa 12, POLAND

tel. +48 81 825-32-41 e-mail: [gumet@gumet.pl](mailto:gumet@gumet.pl)  
tel./fax +48 81 825-22-31 e-mail: [marketing@gumet.pl](mailto:marketing@gumet.pl)

[www.gumet.pl](http://www.gumet.pl) [www.polandrubber.com](http://www.polandrubber.com)



| ŚREDNICA<br>DIAMETER |          | WAGA<br>NETTO<br>NETT<br>WEIGHT |
|----------------------|----------|---------------------------------|
| cale<br>inch         | mm<br>mm | kg/1000 szt.<br>kg/1000 pcs.    |
| 29/32                | 23,019   | 49,680                          |
|                      | 23,230   | 51,000                          |
| 15/16                | 23,812   | 54,930                          |
| 31/32                | 24,606   | 60,610                          |
|                      | 25,000   | 63,568                          |
| 1"                   | 25,400   | 66,670                          |
| 1" 1/16              | 26,988   | 79,970                          |
| 1" 1/8               | 28,575   | 94,900                          |
|                      | 30,000   | 109,800                         |
| 1" 3/16              | 30,162   | 111,600                         |
| 1" 1/4               | 31,750   | 130,200                         |
| 1" 5/16              | 33,338   | 150,700                         |
| 1" 3/8               | 34,925   | 173,300                         |
|                      | 35,000   | 174,400                         |
| 1" 7/16              | 36,512   | 198,000                         |
| 1" 1/2               | 38,100   | 225,000                         |
| 1" 9/16              | 39,688   | 254,400                         |
|                      | 40,000   | 260,375                         |
| 1" 5/8               | 41,275   | 286,100                         |
| 1" 11/16             | 42,862   | 320,400                         |
| 1" 3/4               | 44,450   | 357,300                         |
|                      | 45,000   | 370,800                         |

| ŚREDNICA<br>DIAMETER |          | WAGA<br>NETTO<br>NETT<br>WEIGHT |
|----------------------|----------|---------------------------------|
| cale<br>inch         | mm<br>mm | kg/1000 szt.<br>kg/1000 pcs.    |
| 1" 7/8               | 47,625   | 439,500                         |
|                      | 50,000   | 508,600                         |
| 2"                   | 50,800   | 533,300                         |
| 2" 1/16              | 52,388   | 585,000                         |
| 2" 1/8               | 53,975   | 640,000                         |
| 2" 1/4               | 57,150   | 759,000                         |
| 2" 3/8               | 60,325   | 893,000                         |
| 2" 1/2               | 63,500   | 1042,000                        |
| 2" 5/8               | 66,675   | 1206,000                        |
| 2" 3/4               | 69,850   | 1386,000                        |
| 3"                   | 76,200   | 1800,000                        |
| 3" 1/8               | 79,375   | 2035,000                        |
|                      | 80,000   | 2083,000                        |
|                      | 90,000   | 2966,000                        |
|                      | 100,000  | 4069,000                        |
|                      | 108,000  | 5126,000                        |
|                      | 110,000  | 5416,000                        |
|                      | 120,000  | 7031,000                        |
|                      | 150,000  | 13733,000                       |
|                      | 200,000  | 32547,000                       |
|                      | 250,000  | 63578,000                       |