

## 鉄鋼標準試料委員会ニュース

## I 最近入庫試料

化学分析用

102-3 (製鋼用鉄) ￥ 5,000 (150 g)

209-1 (炭素専用鋼) ￥ 5,000 (150 g)

512-4~517-4 (肌焼鋼) 各 ￥ 6,000 (150 g)

機器分析用

420-9~461-9 (普通鋼シリーズA) ￥ 60,000 (1組)

## II 入庫試料分析値一覧

| JSS No.           | 元素 | 標準値 (%) | 平均値 (%) | $\sigma \bar{x}$ | 分析所数 |
|-------------------|----|---------|---------|------------------|------|
| 102-3<br>製鋼用鉄     | C  | 4.65    | 4.649   | 0.0407           | 11   |
|                   | Si | 0.26    | 0.255   | 0.0045           | 11   |
|                   | Mn | 0.54    | 0.541   | 0.0067           | 11   |
|                   | P  | 0.089   | 0.0892  | 0.00092          | 10   |
|                   | S  | 0.024   | 0.0245  | 0.00097          | 10   |
|                   | Ni | 0.019   | 0.0187  | 0.00090          | 11   |
|                   | Cr | 0.075   | 0.0747  | 0.00275          | 9    |
|                   | Cu | 0.011   | 0.0114  | 0.00063          | 11   |
|                   | Ti | 0.054   | 0.0543  | 0.00204          | 11   |
|                   | V  | 0.035   | 0.0354  | 0.00174          | 11   |
|                   | As | —       | 0.0021  | 0.00066          | 11   |
|                   | Sn | —       | 0.0015  | 0.0005           | 11   |
|                   | N  | 0.006   | 0.0062  | 0.00051          | 11   |
| 209-1<br>炭素専用鋼    | C  | 0.0060  | 0.00602 | 0.00012          | 11   |
| 420-9<br>普通鋼シリーズA | C  | 0.10    | 0.103   | 0.0068           | 11   |
|                   | Si | 0.020   | 0.0202  | 0.0022           | 11   |
|                   | Mn | 0.42    | 0.420   | 0.0069           | 10   |
|                   | P  | 0.031   | 0.0310  | 0.00116          | 11   |
|                   | S  | 0.032   | 0.0319  | 0.00149          | 10   |
|                   | Ni | 0.15    | 0.154   | 0.0049           | 11   |
|                   | Cr | 0.055   | 0.05454 | 0.0011           | 11   |
|                   | Mo | 0.017   | 0.0174  | 0.00049          | 11   |
|                   | Cu | 0.11    | 0.106   | 0.0039           | 11   |
|                   | Al | 0.024   | 0.0245  | 0.00087          | 11   |
|                   | As | 0.011   | 0.0106  | 0.00055          | 11   |
|                   | Sn | 0.012   | 0.0123  | 0.00072          | 11   |
|                   | N  | —       | 0.00188 | 0.00022          | 11   |
| 421-9<br>普通鋼シリーズA | C  | 0.14    | 0.140   | 0.0039           | 11   |
|                   | Si | 0.021   | 0.0213  | 0.00160          | 11   |
|                   | Mn | 0.40    | 0.399   | 0.0067           | 11   |
|                   | P  | 0.030   | 0.0301  | 0.00083          | 11   |
|                   | S  | 0.030   | 0.0303  | 0.00075          | 10   |
|                   | Ni | 0.013   | 0.0134  | 0.00050          | 10   |
|                   | Cr | —       | 0.00200 | 0.00085          | 11   |
|                   | Mo | —       | —       | —                | —    |
|                   | Cu | —       | —       | —                | —    |
|                   | Al | —       | 0.0055  | 0.00078          | 11   |
|                   | As | —       | —       | —                | —    |
|                   | Sn | —       | —       | —                | —    |
|                   | N  | —       | 0.00192 | 0.00018          | 11   |

| JSS No.           | 元素 | 標準値 (%) | 平均値 (%) | $\sigma \bar{x}$ | 分析所数 |
|-------------------|----|---------|---------|------------------|------|
| 430-9<br>普通鋼シリーズA | C  | 0.20    | 0.200   | 0.0042           | 11   |
|                   | Si | 0.11    | 0.109   | 0.0052           | 10   |
|                   | Mn | 0.52    | 0.522   | 0.0051           | 11   |
|                   | P  | 0.030   | 0.0305  | 0.00147          | 11   |
|                   | S  | 0.032   | 0.0322  | 0.00056          | 10   |
|                   | Ni | 0.054   | 0.0538  | 0.00067          | 10   |
|                   | Cr | 0.10    | 0.102   | 0.0041           | 11   |
|                   | Mo | 0.012   | 0.0124  | 0.00046          | 10   |
|                   | Cu | 0.10    | 0.105   | 0.0039           | 11   |
|                   | Al | 0.024   | 0.0244  | 0.00072          | 10   |
|                   | As | 0.010   | 0.0103  | 0.00064          | 11   |
|                   | Sn | 0.012   | 0.0118  | 0.00059          | 10   |
|                   | N  | —       | 0.0018  | 0.00017          | 11   |
| 440-9<br>普通鋼シリーズA | C  | 0.39    | 0.388   | 0.0065           | 11   |
|                   | Si | 0.25    | 0.254   | 0.0054           | 11   |
|                   | Mn | 0.52    | 0.518   | 0.0065           | 11   |
|                   | P  | 0.020   | 0.0203  | 0.00093          | 11   |
|                   | S  | 0.020   | 0.0201  | 0.00058          | 11   |
|                   | Ni | 0.052   | 0.0522  | 0.00059          | 10   |
|                   | Cr | 0.10    | 0.101   | 0.0020           | 11   |
|                   | Mo | 0.010   | 0.0097  | 0.00056          | 11   |
|                   | Cu | 0.085   | 0.0851  | 0.00140          | 11   |
|                   | Al | 0.033   | 0.0328  | 0.00129          | 11   |
|                   | As | 0.010   | 0.0097  | 0.00081          | 11   |
|                   | Sn | 0.011   | 0.0112  | 0.00059          | 10   |
|                   | N  | —       | 0.00190 | 0.00324          | 11   |
| 460-9<br>普通鋼シリーズA | C  | 0.62    | 0.620   | 0.0059           | 11   |
|                   | Si | 0.25    | 0.253   | 0.0078           | 11   |
|                   | Mn | 0.52    | 0.517   | 0.0079           | 11   |
|                   | P  | 0.022   | 0.0217  | 0.00096          | 11   |
|                   | S  | 0.020   | 0.0200  | 0.00078          | 11   |
|                   | Ni | 0.014   | 0.0139  | 0.00060          | 11   |
|                   | Cr | 0.024   | 0.0244  | 0.00077          | 11   |
|                   | Mo | 0.007   | 0.0071  | 0.00070          | 11   |
|                   | Cu | 0.086   | 0.0857  | 0.00131          | 11   |
|                   | Al | 0.040   | 0.0398  | 0.00095          | 10   |
|                   | As | 0.021   | 0.0210  | 0.00102          | 11   |
|                   | Sn | —       | 0.0060  | 0.00061          | 11   |
|                   | N  | —       | 0.00191 | 0.000346         | 11   |

| JSS No.           | 元素 | 標準値 (%) | 平均値 (%) | $\sigma \bar{x}$ | 分析所数 |
|-------------------|----|---------|---------|------------------|------|
| 461-9<br>普通鋼シリーズA | C  | 0.77    | 0.774   | 0.0084           | 11   |
|                   | Si | 0.25    | 0.249   | 0.0084           | 11   |
|                   | Mn | 0.52    | 0.520   | 0.0071           | 11   |
|                   | P  | 0.022   | 0.0217  | 0.00072          | 11   |
|                   | S  | 0.020   | 0.0200  | 0.00067          | 11   |
|                   | Ni | 0.033   | 0.0334  | 0.00096          | 11   |
|                   | Cr | 0.043   | 0.0427  | 0.00137          | 11   |
|                   | Mo | 0.011   | 0.0111  | 0.00088          | 10   |
|                   | Cu | 0.085   | 0.0848  | 0.00111          | 1    |
|                   | Al | 0.026   | 0.0255  | 0.00077          | 11   |
|                   | As | 0.019   | 0.0186  | 0.00060          | 11   |
|                   | Sn | —       | 0.0109  | 0.00136          | 11   |
|                   | N  | —       | 0.00191 | 0.000373         | 11   |
| 512-4<br>肌焼鋼シリーズA | C  | 0.076   | 0.0763  | 0.00192          | 10   |
|                   | Si | 0.14    | 0.0139  | 0.0046           | 10   |
|                   | Mn | 0.40    | 0.399   | 0.0053           | 10   |
|                   | P  | 0.011   | 0.0106  | 0.00047          | 10   |
|                   | S  | 0.010   | 0.0102  | 0.00054          | 10   |
|                   | Ni | 0.031   | 0.0132  | 0.00123          | 10   |
|                   | Cr | 0.036   | 0.0365  | 0.00153          | 10   |
|                   | Mo | 0.007   | 0.0066  | 0.00083          | 10   |
|                   | Cu | 0.067   | 0.0668  | 0.00094          | 10   |
|                   | V  | 0.002   | 0.0020  | 0.00037          | 10   |
|                   | Al | 0.019   | 0.0190  | 0.00103          | 10   |
|                   | N  | —       | 0.00704 | 0.000363         | 10   |
| 513-4<br>肌焼鋼シリーズA | C  | 0.16    | 0.163   | 0.0042           | 10   |
|                   | Si | 0.25    | 0.253   | 0.0042           | 10   |
|                   | Mn | 0.79    | 0.788   | 0.0071           | 10   |
|                   | P  | 0.012   | 0.0123  | 0.00048          | 10   |
|                   | S  | 0.010   | 0.0096  | 0.00052          | 10   |
|                   | Ni | 0.13    | 0.132   | 0.0058           | 10   |
|                   | Cr | 1.15    | 1.154   | 0.0088           | 10   |
|                   | Mo | 0.010   | 0.0099  | 0.00052          | 10   |
|                   | Cu | 0.074   | 0.0740  | 0.00047          | 10   |
|                   | V  | 0.005   | 0.0048  | 0.00035          | 10   |
|                   | Al | 0.025   | 0.0253  | 0.00054          | 10   |
|                   | N  | 0.0121  | 0.01214 | 0.000339         | 9    |
| 514-4<br>肌焼鋼シリーズA | C  | 0.24    | 0.236   | 0.0060           | 10   |
|                   | Si | 0.29    | 0.294   | 0.0069           | 10   |
|                   | Mn | 0.76    | 0.758   | 0.0042           | 10   |
|                   | P  | 0.012   | 0.0124  | 0.00070          | 10   |
|                   | S  | 0.010   | 0.0105  | 0.00047          | 10   |
|                   | Ni | 0.19    | 0.189   | 0.0032           | 10   |
|                   | Cr | 1.07    | 1.070   | 0.0088           | 10   |
|                   | Mo | 0.26    | 0.263   | 0.0042           | 10   |
|                   | Cu | 0.090   | 0.0905  | 0.00088          | 10   |
|                   | V  | 0.007   | 0.0068  | 0.00054          | 10   |
|                   | Al | 0.019   | 0.0188  | 0.00075          | 10   |
|                   | N  | 0.0176  | 0.01763 | 0.000287         | 9    |
| 515-4<br>肌焼鋼シリーズA | C  | 0.18    | 0.180   | 0                |      |
|                   | Si | 0.24    | 0.244   | 0.0052           | 10   |
|                   | Mn | 0.63    | 0.630   | 0.0072           | 10   |
|                   | P  | 0.011   | 0.0108  | 0.00035          | 10   |
|                   | S  | 0.013   | 0.0129  | 0.00058          | 9    |
|                   | Ni | 2.29    | 2.287   | 0.0092           | 10   |
|                   | Cr | 0.36    | 0.364   | 0.0060           | 10   |
|                   | Mo | 0.020   | 0.0201  | 0.00053          | 10   |
|                   | Cu | 0.080   | 0.0795  | 0.00111          | 10   |
|                   | V  | 0.006   | 0.0061  | 0.00052          | 10   |
|                   | Al | 0.022   | 0.0225  | 0.00074          | 10   |
|                   | N  | 0.0081  | 0.00812 | 0.000167         | 10   |
| 516-4<br>肌焼鋼シリーズA | C  | 0.22    | 0.222   | 0.0049           | 10   |
|                   | Si | 0.28    | 0.284   | 0.0041           | 10   |
|                   | Mn | 0.97    | 0.972   | 0.0063           | 10   |
|                   | P  | 0.012   | 0.0117  | 0.00054          | 10   |
|                   | S  | 0.012   | 0.0124  | 0.00049          | 9    |
|                   | Ni | 3.02    | 3.024   | 0.0114           | 10   |
|                   | Cr | 1.69    | 1.690   | 0.0062           | 10   |
|                   | Mo | 0.41    | 0.407   | 0.0067           | 10   |
|                   | Cu | 0.084   | 0.0836  | 0.00069          | 10   |
|                   | V  | 0.010   | 0.00985 | 0.00071          | 10   |
|                   | Al | 0.031   | 0.0310  | 0.00104          | 10   |
|                   | N  | 0.0100  | 0.01000 | 0.000258         | 10   |
| 517-4<br>肌焼鋼シリーズA | C  | 0.19    | 0.193   | 0.0054           | 10   |
|                   | Si | 0.27    | 0.267   | 0.0075           | 10   |
|                   | Mn | 1.07    | 1.073   | 0.0059           | 10   |
|                   | P  | 0.013   | 0.0133  | 0.00042          | 10   |
|                   | S  | 0.012   | 0.0117  | 0.00066          | 9    |
|                   | Ni | 2.97    | 2.974   | 0.0070           | 10   |
|                   | Cr | 1.53    | 1.532   | 0.0075           | 10   |
|                   | Mo | 0.52    | 0.521   | 0.0061           | 10   |
|                   | Cu | 0.072   | 0.0720  | 0.00062          | 10   |
|                   | V  | 0.006   | 0.0060  | 0.00064          | 10   |
|                   | Al | 0.028   | 0.0280  | 0.00090          | 10   |
|                   | N  | 0.0105  | 0.01048 | 0.000199         | 9    |