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| Function | Solution Principles | | |
| Floor Contact | 4 Wheels | 3 Wheels |  |
| Forward Movement | Rear-Wheel Drive | Front-Wheel Drive |  |
| Steering | Servo on wheel(s) | Motor steering + wheel castor | Motor steering + ball castor |
| Mine Pickup | Linear Scoop + lift | Radial Forward Scoop | Radial Sideways Scoop |
| Scoop Torque | 2 motors | 1 motor + 1 static ‘wall’ |  |
| Scoop Shape | 4 bladed solid | Flat Plate | Curved Plate |

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| Criteria | Concept 1 (DATUM = 0) | Concept 2 (-2 to +2) |
| Maneuverability | Conventional steering method, good for both forward/reverse | -2 Motor steering may be less accurate, reverse may steer out of control |
| Manufacturing | Extra mount for servo+wheel | +2 ball castor simpler, also simpler motor installations |
| Materials | 3D print blades | +1 metal plate blade |
| Timescales |  | 0 |
| Integration | Extra steering output (servo), scoop takes more room | 0 Front motors may interfere with sensor |
| Risks | Rotation may be inaccurate, leading to lack of sliding | -1 May not be close enough sideways to dispose mine into correct area |
| Total | 0 | 0 |