

M C P S E R V E R

N O C O D E

C L O U D H O S T E D

Deadlift Setup Calculator MCP

Get precise lifting dimensions based on your specific body proportions.

Deadlift Setup Calculator MCP uses your height, arm length, torso, and leg measurements to calculate the most efficient lifting positions. Your AI client can determine your ideal hip height, stance width, and grip width, or compare conventional and sumo styles to find your best mechanical advantage.

A+ Quality Score 100/100

deadlift

anthropometry

powerlifting

strength

fitness-tech



The connectivity layer between AI and the world's software.

Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.

— Architecture principle

Four Pillars of the Vinkius Runtime

01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

AES-256

Encryption at rest

Ed25519

PKI vault signatures

24h TTL

Ephemeral session keys

V8 Isolate

Sandboxed execution

One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

Emergency Kill Switch

EU AI Act Art. 14(1)
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

Control Plane

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

FinOps

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

Firewall & DLP

PII redaction activity, sensitive data protection counters, and security event timeline.

Agent Activity

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

Tool Health

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

Incident Log

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at cloud.vinkius.com — connect your AI agent in under 60 seconds.

Deadlift Setup Calculator MCP

4 tools available

Cloud-hosted on Vinkius

Stop guessing your setup on the platform. This MCP uses anthropometric data to calculate the exact physical dimensions you need for a more efficient deadlift. Instead of relying on general advice, you provide your specific measurements like arm length and torso height, and your AI agent calculates the optimal hip height and stance width for your build. You can use it to settle the debate between sumo and conventional styles by seeing which one offers you a better range of motion. It also provides a qualitative look at your mechanical advantage, helping you identify if hip drive or other factors will limit your lifts. Before you pull, you can even have your agent check if your calculated position stays within safe physiological bounds to prevent injury.

Core Capabilities

01 — Anthropometric Calculation

The AI uses your height and limb lengths to find precise setup dimensions.

02 — Style Comparison

Your agent compares the range of motion between sumo and conventional pulls.

03 — Leverage Analysis

The MCP identifies your mechanical advantage profile based on your proportions.

04 — Safety Validation

Your AI client checks if your calculated setup is within safe physiological bounds.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/en/ai-agent-connect/deadlift-setup-calculator — connect your AI agent in three steps.

- 01
- Connect the MCP to Claude, Cursor, or your preferred client via Vinkius.
- 02
- Provide your height, arm length, torso length, and leg length to your AI agent.
- 03
- Ask for specific setup parameters or a style comparison.
- 04
- Receive precise measurements or leverage profiles to use in your training.

Connect the MCP to your AI client and provide your physical measurements to get instant lifting data.

Built For

This MCP is built for anyone looking to remove the guesswork from their heavy pulls using biomechanical data.

Powerlifters

Use it to find the most efficient stance and grip for competition.

Strength Coaches

Hand off client measurements to the AI to generate optimized setup instructions.

Fitness Researchers

Analyze how different body proportions impact lifting mechanics.

What Changes When You Connect

- 01
- Removes guesswork by using actual body measurements instead of general rules.
- 02
- Identifies the best lifting style for your specific limb lengths.
- 03
- Provides a safety check for your calculated positioning.

04 Quantifies mechanical advantages to help target training.

Real-World Applications

Choosing a Deadlift Style

Decide between sumo and conventional by seeing which offers a better range of motion for your build.

Identifying Weak Points

Determine if your proportions make you more susceptible to hip drive limitations.

Optimizing Setup

Get exact numbers for hip height and stance width before you approach the bar.

Injury Prevention

Verify that your planned setup is mechanically safe for your physiology.

4 Tools Available

#	TOOL	DESCRIPTION
01	compare_variations	Compares conventional and sumo deadlift setups for your specific body type.
02	get_mechanical_advantage_profile	Analyzes how your limb proportions affect your lifting efficiency.
03	get_setup_parameters	Calculates specific hip height, stance width, and grip width based on your body measurements.
04	validate_setup_readiness	Checks if your calculated setup parameters fall within safe physiological limits.

See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

U Calculate my deadlift setup for a conventional style. I am 180cm tall, have 80cm arms, 55cm torso, and 90cm legs.



Your optimal conventional setup includes a hip height of 42.5cm, a stance width of 25.0cm, and a grip width of 52.0cm with a Neutral spine angle.

U Should I do sumo or conventional? I have 85cm arms, 50cm torso, and 95cm legs, and I am 175cm tall.



Based on your proportions, the Sumo variation is optimal, offering a 5.2cm reduction in range of motion compared to conventional.

U What is my mechanical advantage profile with 75cm arms, 60cm torso, and 85cm legs?



You have a Standard-Lever profile, with Hip Drive being your primary limiting factor.

Frequently Asked Questions

01 How do I use this MCP with my AI?

You connect it once through Vinkius. After that, you can simply talk to your AI client in Claude or Cursor and ask it to perform the calculations.

02 What measurements do I need to provide?

You will need to provide your height, arm length, torso length, and leg length to get accurate setup parameters.

03 Can it help me choose between sumo and conventional?

Yes. The `compare_variations` tool compares the two styles based on your specific proportions.

04 Does it provide safety information?

Yes. The `validate_setup_readiness` tool checks if your calculated setup is within safe physiological bounds.

05 Is this for any type of deadlift?

The MCP focuses on calculating setup parameters like hip height and stance width for conventional and sumo styles.

Go Live in 60 Seconds

Get your connection token from cloud.vinkius.com, then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

`https://edge.vinkius.com/[TOKEN]/mcp`

CLIENT	WHERE TO CONFIGURE
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+" Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"deadlift-setup-calculator": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	Extensions → Add MCP Server → Paste endpoint URL

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  Ask ChatGPT 
-  Ask Claude 
-  Ask Perplexity 
-  Ask Gemini 
-  Ask Grok 

READY TO CONNECT

Deadlift Setup Calculator is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and
start building. No SDK. No deployment. Just results.

Start at cloud.vinkius.com →

vinkius.com · support@vinkius.com

INDEPENDENT PLATFORM DISCLAIMER

Vinkius is an independent platform and is not affiliated with, endorsed by, sponsored by, verified by, or otherwise authorized by Deadlift Setup Calculator. All third-party trademarks, logos, and brand names are the property of their respective owners. Their use in this document is strictly for informational purposes to identify service compatibility and interoperability.

DOCUMENT INFORMATION

Generated	September 2026
MCP Server	Deadlift Setup Calculator MCP
Server ID	01a0b1d6-8573-73df-a1d9-c1b7cd473668
Platform	Vinkius Cloud for AI Agents
Endpoint	<code>https://edge.vinkius.com/{token}/mcp</code>

LICENSE & USAGE

This document is generated automatically by the Vinkius PDF Engine. Content reflects the MCP server configuration at the time of generation and may change as updates are deployed. For the most current information, visit vinkius.com/en/ai-agent-connect/deadlift-setup-calculator.